AUDIT IN

BSNL ERP

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Foreword

(By DGA P&T)

Preface

Auditing in an IT environment is a challenge. There will be no paper trails for transactions, organizational processes are integrated and the control mechanisms are difficult to understand. For effective audit, auditors need the skill and expertise to interact with the IT system of the audited entity.

During 2014-15, BSNL migrated to SAP, a leading ERP (Enterprise Resource Planning) product from the SAP AG, Germany. Before migration to SAP, the computerization in BSNL was compartmentalized with no communication between them. Multiple IT solutions were used for various functions like Pay Roll, Telecom Revenue Billing and Accounting, Customer Care, Inventory/Material Management, Financial Accounting etc. But all organizational functions except Telecom Revenue Billing & Accounting (RA) and Customer Relation Management (CRM) have been migrated to SAP R/3. SAP is an integrated IT solution catering to all needs of the Company. Expertise to audit in SAP environment is essential for all future audits in BSNL. It will also be useful in revenue share audit of Private Service Providers also.

The handbook also provides simple tutorial on the basics of SAP and the Business Process Reengineering (BPR) carried out by the BSNL Management in connection with migration to SAP. The handbook contains screenshots of SAP with guidance on how to access the accounting data by using the SAP Menu and Transaction Codes. The handbook is not comprehensive. Some functional areas could not be covered due to access restrictions.

Recently DoP has also implemented SAP as part o modernization project. The basic concepts, organizational structure and the transaction codes for interacting with SAP are universal in nature, the experience gained from audit in BSNL ERP will help in audit of DoP.

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PART 1: INTRODUCTION

1. 1 Introduction

BSNL implemented the pilot project for implementation of SAP in Gujarat Circle in 2007. The Company initiated all India roll out of SAP in 2008 which was completed in 2016. The Business Process Reengineering (BPR) was done by M/f Earnest & Young, System consultant was HCL AXION and the Software Solution Provider (SSP) was M/S SAP AG. BSNL has entered in to 7 year support service contract with HCL Axion. The project encompassed 65,000 SAP licenses and 315,000 ESS (Employee Self Service) licenses covering all employees.

1.2 What is SAP?

SAP is an ERP[1] (Enterprise Resource Planning) software product of German company SAP AG[2]. It is a package of integrated applications called modules. SAP Software was founded in 1972 by Wellenreuther, Hopp, Hector, Plattner and Tschira.

1.3 Pre-SAP Vs Post-SAP environnent

Major business re-engineering activities were carried out by BSNL in connection with migration to SAP based on the recommendations of Ernst & Young. As auditors, we should understand the difference between the pre-SAP environment and post-SAP environment in BSNL. The salient features are:

■ **Integrated approach:** Change from Compartmental approach to integrated approach- In SAP all organizational functions and processes (administrative, HRD, S&D, Material Management, Project management, financial accounting, etc) are managed by independent modules integrated in to a single IT solution. The legacy IT solutions were independent with no inter-system communication. SAP replaced most of the legacy IT Systems in BSNL except Telephone Revenue Billing and Accounting which is done by the existing billing systems.

■ **Merger of Civil/Electrical/CMTS/CTSD:** Accounting of Civil/Electrical Units, CMTS and CTSD are merged with respective SSAs, resulting in significant reduction in

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[1] **ERP**: *Enterprise Resource Planning is the process of integrating all the business functions and processes in an organization. SAP is the*

[2] **SAP AG** *is the German company founded by 5 former IBM system engineers in 1972. AG stands for Advanced Generation.*

the number of Primary Accounting Units (PAUs). The field level operational units (SSAs) are referred to as **Business Areas** (BAs) in SAP.

■**Centralized Settlement**: The payment & settlement functions are centralized at Corporate office and Circle office level (Central Settlement Cells). Drawing & Disbursing units at SSA level are discontinued. No cheque drawing powers at SSA level. CSC in each circle shall have distinct sections for payment, processing of following category of payments at Circle Office level only. CSC in each circle shall have distinct sections for payment, processing of following category of payments at Circle Office level only:

(a) Capital payments (b) Maintenance & administrative expenses excluding employee claims (c) Employee claims and pay billing

■**Consolidation of Bank Accounts:** All banking operations are consolidated in a single Operational Account at Corporate/Circle office. The Operational Bank Accounts at SSA/DDO level have been closed.

■**Reduction in HOAs:** The Head of Accounts (HOAs) have been reduced from 6100 to 3700.

■ **Change in nomenclature:** The nomenclatures of BSNL units in SAP are denoted differently from that in the pre-SAP period as given below:

| Pre-SAP	Post-SAP	From March 2019
Circle	Company [3]	Business Area
SSA	Business Area	
Service	Profit Centre	Profit Centre
SDCA	Cost Centre	Cost Centre
Exchange	Internal Order	Internal Order

SAP handles all organizational functions of BSNL except telecom billing, which will continue to be done by the existing software. Billing of services in SAP will be done only for Franchisees, REM, VSAT (if required), Telecom Factories & Training centers, retail sale of prepaid items and other such services for which standard billing package is not available.

> SAP stands for "**Systeme, Anwendungen, Produkte in der Datenverarbeitung**" in German which means System, Applications, Products.. But SAP will turn out **'Slow And Painful'** for some users and **"Smooth and Powerful"** for some others. The success of SAP depends on how well the **Change Management** is carried out by the Management.

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[3] *In March 2019, the Circle-wise Company Codes were merged in to a single Code 1100. New Codes were assigned to BSNL Circles. Original BA Codes for SSAs were not changed.*

1.4 SAP Architecture

SAP has a three layer architecture- Database, Application and Presentation. The Data Centers are located at Hyderabad and the Disaster Recovery site is at Kolkata. Connectivity is extended on the Intranet rolled out for CDR (Call Data Record) Project.
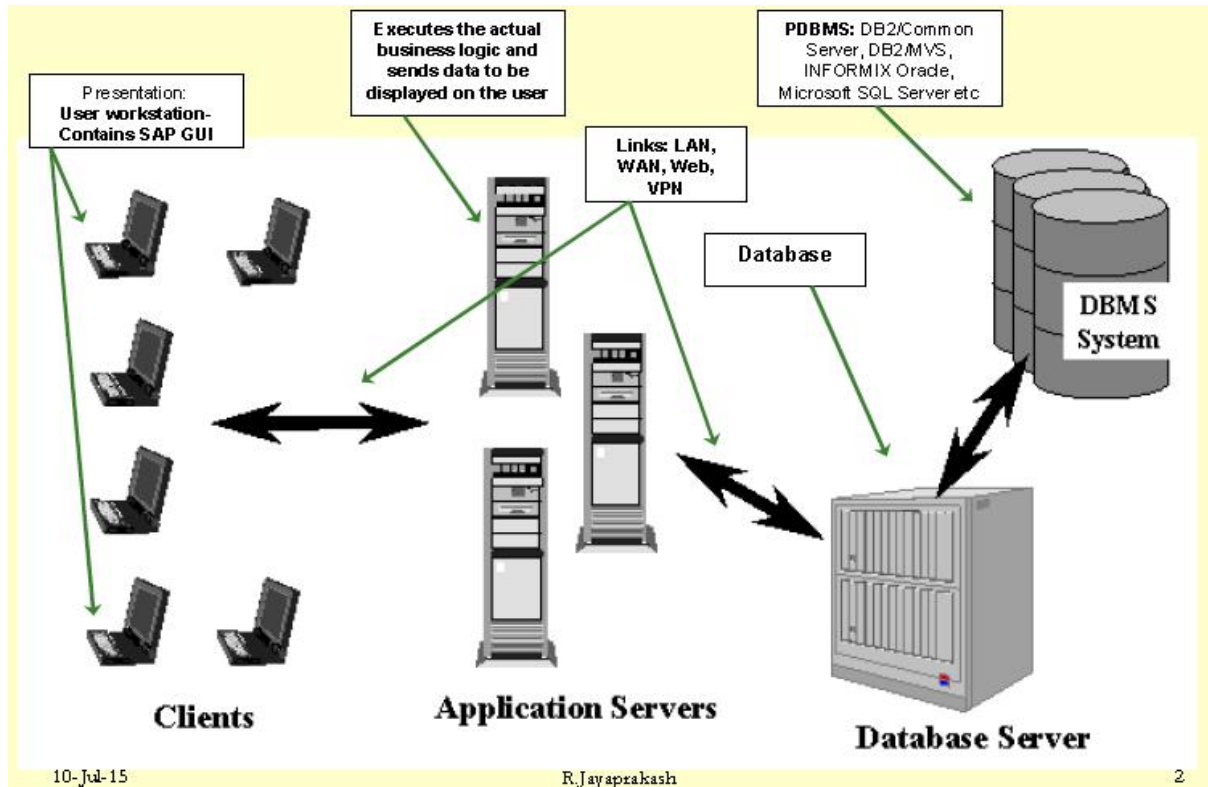
1.5 SAP Modules

SAP is an integrated package of different software solutions called modules. There are functional modules and technical modules.

All SAP Modules List

SAP FICO	SAP MM	SAP IDM	SAP IM	SAP Basis
SAP HCM	SAP BI	SAP FSCD	SAP PLM	SAP Ariba
SAP HR Functional	SAP IDM	SAP WM	SAP PO	SAP PI
SAP HANA Administration	SAP IBP	SAP HANA	SAP FIORI	SAP OOPS ABAP

SAP GRC	SAP Hybris	SAP GTS	SAP FICO	SAP HANA
SAP UI5	SAP HR Functional	SAP GRC	SAP PP	SAP MRS
SAP ABAP	SAP HR	SAP FSCM	SAP PM	SAP SRM
SAP FIORI	SAP EWM	SAP ESS MSS	SAP ERP	SAP CS
SAP BPC	SAP BODS	SAP BODI	SAP BO	SAP BI ABAP
SAP SuccessFactors	SAP Vistex	SAP Hybris	SAP CRM	SAP FSCM
SAP SuccessFactors LMS	SAP HANA ADMINISTRATION	SAP BW On HANA	SAP HR	SAP Business One
SAP Treasury And Risk Management	SAP ABAP On HANA	SAP Simple Finance	SAP IS RETAIL	SAP WORKFLOW
SAP Webdynpro	SAP CO	SAP MDM	SAP GTS	SAP GRC
SAP Workflow	SAP ABAP	SAP APO	SAP BW	SAP COPA
SAP NetWeaver	SAP HANA Administration			

The modules available in BSNL's SAP

Sl No	ERP Module	Functional Area
1	Finance And Management Accounting (FICO)	This module records transactions into the general ledger accounts, external account statements, the balance sheet, profit and loss statement and statement of cash flows. This module also includes account receivables and account payable functions.
2	Materials & Inventory Management including E-Procurement (MM)	Function related to acquisition of goods from vendors and management of goods in the warehouse. This module prepares and records a purchase order, receives goods from vendors and record the vendors invoice.
3	Plant & Equipment Maintenance (PM)	Planned & Unplanned Maintenance of various technical objects of Consumer Mobility, Broad Band, CFA, IT, Transmission (Equipment & Route), Electro-Mechanical, Civil, Ducts, Fleet etc. including their Log books [Condition Monitoring] & History Sheets [Catalog] and

| | | Scrapping, Re-parenting (Shifting) etc.

Notification types: Preventive, Breakdown, General, Corrective, Calibration, Shutdown, Energy Audit & Report Fault (G-1) with corresponding order types. |
|---|---|---|
| 4 | Human Capital Management (HCM) | Functions related to the recruitment, management and administration of personnel, payroll processing and personnel training and travel. The HR module is also used to maintain data related to training and work benefits. |
| 5 | Sales and Distribution (S&D) | Functions related to the sale of goods to customers and include recording customers order, shipping of good to customer, and billing the customer. They are interconnected to the Material Management module to check the availability of inventory and record the issue of goods, the Financial Accounting module to record the sales and the Controlling module for profitability analysis. |
| 6 | Project Systems (PS) | Execution & Monitoring of Capital Project works of various business lines e.g. CM, BB, CFA, General (Civil & Electrical) including Project Creation, its approval and Budget Allotment.
External Projects Execution & Monitoring.
Elements are Project, WBS (Work breakdown structure), Network, Activity, Cost Settlement and AUC (Asset under construction).

SAP Project System supports comprehensive functions for planning, controlling and organizing all the activities carried out during the course of a project. It helps you manage your project structures, dates, and costs throughout the entire project lifecycle. |
| 7 | Real Estate and Telecom Infrastructure Management (REM) | Lease-in & Lease-out of Land and Buildings.
Lease-in & Lease-out of CMTS Towers & USO Towers (Part-A and Part-B) – Under Development.
Staff Quarter Allotment to Employees & Others.
Temporary Allotment of Staff Quarters.
Booking/Allotment of Inspection Quarter, Holiday Home, Hostel, Community Centre, |

		Auditorium etc. Management of Contracts. Purchase of Land and Buildings
8	Production Management, Supply Chain Management & Quality Management. (PP/QM)	PP handles all business processes related with production. it is used to perform quality functions such as quality planning, quality assurance, and quality control, at various stages such as incoming material stage, in-process manufacturing process stage, and after production as well.
9	Enterprise Portal (EP)	Using SAP Enterprise Portal, organizations can give their employees, customers, partners, and suppliers a single point of access to the company applications, services, and information needed for conducting daily work. In addition, the portal offers business users the capability to easily create and manage portal pages and to generate their own portal content.
11	Quality Management (QM)	SAP QM (Quality Management) is an integral part of the supply chain and logistics functions. It is fully integrated with complementary components including: • Materials Management (MM) • Plant Maintenance (PM) • Production Planning (PP) QM is used for quality planning, quality assurance and quality control.
13	BASIS	• Support for readiness of Networking. • Guidelines for readiness of PC for ERP access. • Roles and Authorization being done centrally • MANTIS (ERP Helpdesk).

ABAP
SAP is developed using a 4ᵗʰ Generation proprietary language called ABAP (Advanced Business Application Programming)

1.6 SAP Concepts

Familiarization with some important concepts in SAP is essential for an Auditor.

1.6.1   SAP Organizational Structure

SAP has a distinct organizational structure. During the implementation of the SAP system, the company would define and design the organizational structure in the SAP for maintenance of data in an organized manner.

BSNL has a 5-tier organizational structure in SAP with distinct codes.

Client   : BSNL Corporate (Client Code 10000)

Company   : The smallest organizational unit for which individual financial statements can be drawn according to the applicable commercial laws. Each BSNL Circle was a Company in SAP till February 2019. Each Company is assigned a Company Code. (Eg Kerala: 1022, West Bengal, Gujarat). In March 2019, all the existing 51 company codes (Circles) have been merged in to into single Company Code, denoted by 1100. A new field for Circle Code has been introduced to identify the Circle for which posting is being made.

Business Area: An organizational unit that represents a separate area of operations or responsibilities within an organization (Eg: SSAs, Circle Office, Project, Maintenance, Corporate Office etc)

Functional Area: An organizational unit in accounting that classifies the expenses of the organization by functions (Eg. Administration, S&D, MM etc).

Profit Centre   : A profit center is a management oriented organizational unit used for internal controlling purposes (Consumer Fixed Access, Leased Circuits). All revenue postings in SAP have to be mandatorily done with Profit Centre.

Controlling Area: An organizational unit within a company, used to represent a closed system for cost accounting purposes. Company Code can be the Controlling Area (Eg Kerala Circle, broadband)

Cost Centre: An organizational unit within a controlling area that represents a defined location of cost incurrence. (O&M,   Admn). All expenditure are to be booked against the relevant cost centre.

Location: Location in asset accounting signifies the place/plot where a fixed asset is physically located. This organizational unit is used to physically track the asset at different locations.

Plant: A plant is an organizational logistics unit that structures the enterprise from the perspective of procurement, material planning, production and plant maintenance. Each plant is assigned to a company code. One company code can have several plants. A plant can be assigned to only one company code. In BSNL, inventory valuation is done at plant level.

> **No Paper Trails in SAP**
>
> Unlike the legacy systems where we find 'islands of automation', SAP offers a total enterprise solution where all organizational functions are computerized and integrated in to a single software solution. BSNL envisages a paperless environment in SAP. Hence we may not find audit trails in manual form. Auditors have to looks for audit trails within SAP. Knowledge to extract and export data and print docs are essential for auditors.

1.6.2 SAP Jargons

In SAP environment, we come across many jargons which have distinct meanings in SAP. Knowledge on the jargons will be helpful in avoiding confusion (Please refer Item 7: SAP Concepts).

- **Client:** In business parlance a client is a party which is in business transaction with the company (Eg. vendors, contractors, customers are clients of BSNL). But in SAP, a client is a self-contained unit in SAP system with separate master records and its owns set of tables.(BSNL Corporate)

- **Company:** In SAP Company means the smallest organizational unit for which a complete set of financial statements can be drawn according to the applicable commercial laws. Till 2018-19, each circle was a company. All 51 companies were merged into to a single company in March 2019 under Company Code 1100.

- **Transaction:** In commercial terms transaction means any exchange of goods/money. But in SAP transaction means any operation that lets a user make changes to a database.

- **Transaction Codes**: The code used to execute a transaction. Transaction Codes are stored in table TSTC. There are more than one lakh Transaction Codes in SAP. All operations in SAP ar carried out using transaction codes. The Integration Test Script Document available for each module will give you the process flow. For example, the Integration Test Script Document for Project Module of Project Circle will give the entire process flow (with corresponding transaction codes) from Project Planning to Project Completion & Reporting.

Vendor: Vendor in common parlance is a party which deals in goods or services. In SAP, vendor is a party with whom the Company is dealing with. BSNL SAP has the following vendors: Domestic, Foreign, Existing Employees, Retired Employees, HR Third Parties (societies/unions/LIC), Hospitals, Telecom Operators.(for IUC/roaming settlements).

Document: Document is the result of a posting in accounting in SAP, and is the connecting link between various business operations. SAP is based on the 'document principle' meaning that a document is created out of every business transaction in the system. SAP will assign a unique Document number to each document.

General ledger and G/L Account Codes: General ledger is the main accounting record which summarizes all financial transactions in SAP. The financial statements are prepared from GL. All transactions carried out in other modules of SAP that have a financial impact (Eg. Posting of goods received in MM Module,) are captured by the general ledger.

ABAP: The programming language of SAP [Advanced Business Application Programming Language]

WBS: Work Breakdown Structure: WBS refers to the components of work. It is equivalent to Project Estimates and Detailed Estimates.

Posting Period: Each month in a financial year. (Eg. April is Posting period 1, May is 2). There are 16 posting periods in SAP, since the accounts are kept open for another 4 months of the next financial year.

Chart of Accounts (COA): Chart of Accounts is the group of General ledger Accounts for posting transactions of an entity for which a full set of financial statements are prepared.

COD: Charts of Depreciation (COD) is a chart containing different areas of depreciations like Book depreciation (as per Companies Act), Tax depreciation (as per Income Tax Rules), consolidated depreciation, etc. are used in order to manage various legal requirements for the depreciation and valuation of assets. These charts of depreciation are usually country-specific and are defined independently of the other organizational units.

AUC: AUC stands for Asset Under Construction, which was earlier referred to as CWIP (Capital Work in Progress)

1.6.3 SAP Security

Security administration in SAP includes maintenance of the overall SAP security environment using the SAP Profile Generator, creating user-level activity groups and creating user master records.

1.6.4 Interfaces

(i) ERP- Sancharsoft Interface: The Retail sale to the end customers will be done from Sancharsoft. The retail sale data will be fetched from SancharSoft to ERP through an Inbound Interface at the end of the day. The sale to Franchisees/ DSAs etc will be done through ERP.

(ii)   ERP- Pyro Interface: The order for C-Topup sales will be created in ERP and Franchisee/CSCs C-Topup account will be credited through an outbound interface between ERP and Pyro System. Day end sale data of CSCs will be fetched from Pyro system to SAP through inbound interface between Pyro & ERP.

1.7 Data storage in SAP

Data is stored in ORCLE or Sybase Data Base Management Systems. The DBMS used in BSNL SAP is Oracle. The database is stored in tables. (Click here for some important TABLES).

To view the Table List with Classification type RSCLASDU in the command box and enter.
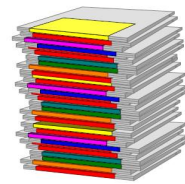
1.8 SAP Help Portal

Online help on SAP is available in the SAP Help Portal.:
https://help.sap.com/viewer/index
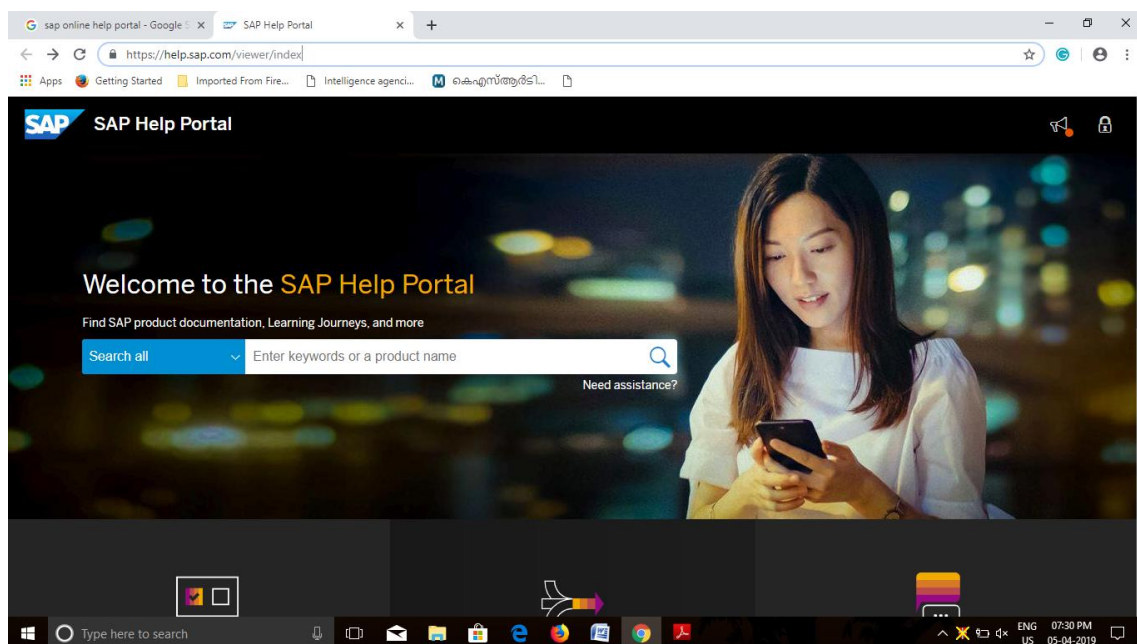
Screenshot 1A: SAP Help Portal

PART 2:   SAP ACCESS

2.1 SAP Access

SAP is integrated software of different Modules performing different functions. Access privileges in SAP depend on the role and responsibilities of the user in the organizational hierarchy. The user management (creation of users, assigning the access levels etc) is done by centrally..

Access to SAP is given only to the Executive employees. But all employees have access to SAP ESS.

2.1.1   Employees Self Service (ESS)

Employees Self Service Portal enables web-based access to SAP for all employees and vendors of BSNL. **ESS** allows BSNL employees to view their HR-related data anytime, anywhere, via web-based technology and functionality in the Enterprise

SAP Netweaver makes possible access to SAP data using simple HTTP protocol or even mobile.

Portal. The web access to ESS portal is provided through the **SAP NetWeaver** **_(eportal.erp.bsnl.co.in)._** ESS also enables submission of leave request, joining report, property returns, personal claims, changes subscriptions, view/print GPF/EPF statement, leave report, salary statement, Form 16, personal data etc.

SAP NetWeaver Portal also allows Vendor Guest login for submission of **e-tenders.**

Service Books will continue to be maintained in physical form and the printout of leave account, pension & lease salary contribution pasted in it.

2.1.2 Connectivity Requirements

SAP GUI in Laptop: Get the SAP GUI installed in your laptop. On installation, SAP GUI shortcut will be created on your laptop. Ensure that you have MS Excel and IDEA for data import and analysis. There should be enough disc space in your laptop to store downloaded data.

Audit User: BSNL has created Audit users for giving SAP access to the auditors. The user is common for internal audit, tax audit, statutory audit and C&AG audit. Obtain the SAP user identification and password from the system administrator.

Since User management is done by the Core Group, creation of new users, change in the access levels etc can be done only centrally by the Core Group.

2.2 Log on to SAP

There are two options to log on to SAP:

Option 1: Click the SAP logon shortcut on the desktop. Click 'Log on' in the Log on Pad.

Screenshot 2.1: SAP Log on Short cut

SAP HANA
SAP HANA is the latest ERP Solution from SAP, which is a combination of Hardware and Software. SAP HANA Database is Main-Memory centric data management platform. SAP HANA Database runs on SUSE Linux Enterprises Server and builds on C++ Language.

Option 2: Go to Programs-SAP Front End-SAP logon
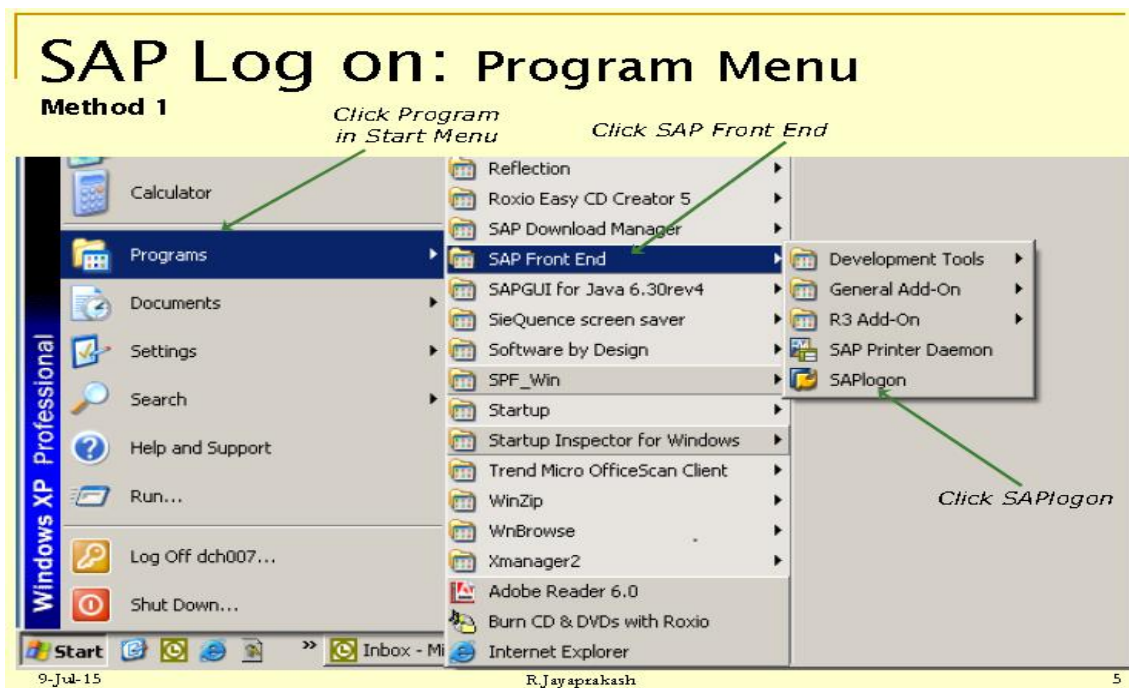
Screenshot 2.2: SAP Log on Program Menu

Now we are on the Log on screen as shown below:
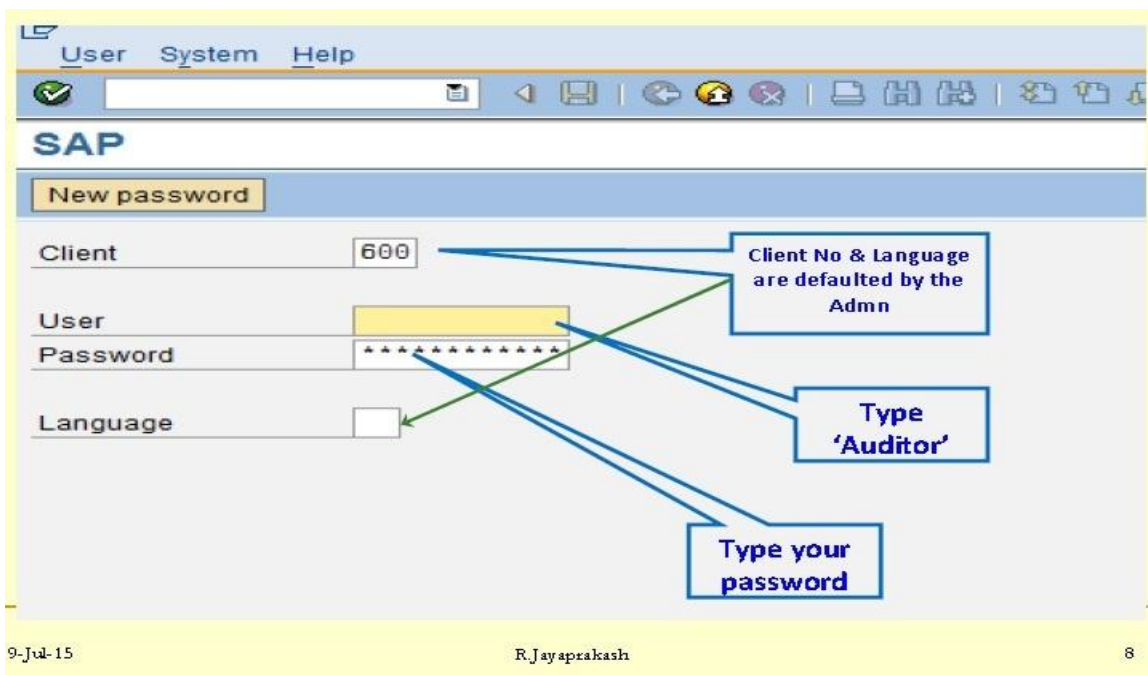
Screenshot 2.3: SAP Log in Screen

Client No   : defaulted by the DBA. This numbers define a whole business entity within the company, or the whole company.

Username   : as assigned to you by BSNL

Password   : as assigned to you by BSNL

Language   : defaulted by the DBA

After entering the password click the icon on the top left corner of the Menu bar. Now the following screen appears:
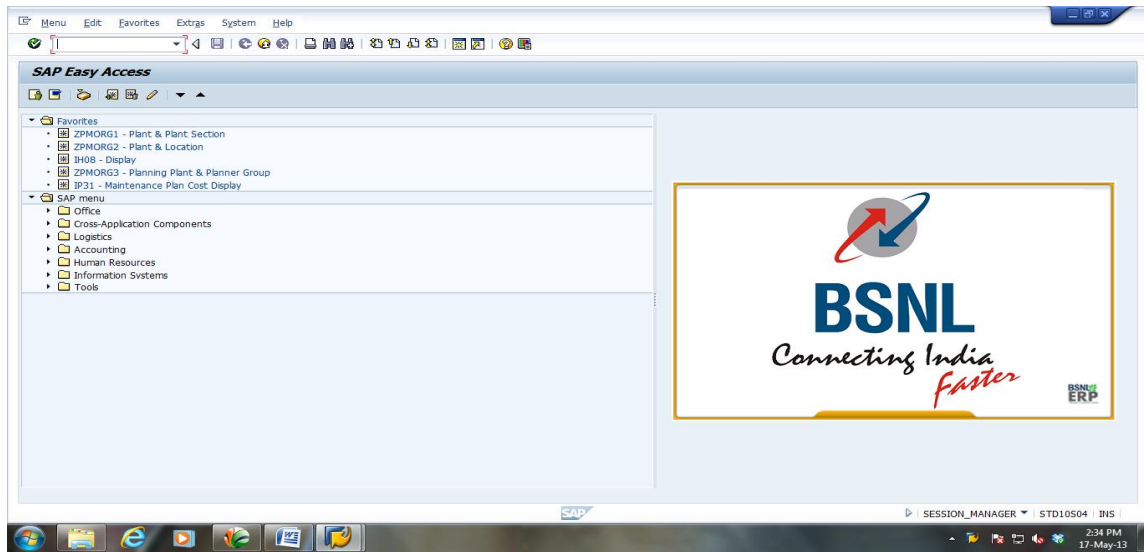
Screenshot 2.4: SAP Easy Access Screen

- **Multiple logins** are not allowed for the same user id. If somebody else login with the same user id, he can terminate you. Hence, get 2 or 3 user ids exclusively for each audit assignment.
- As a security measure, SAP will disable the current password after a specific number of days and allows you to use new password. Inform any such changes made by you to the BSNL authorities on completion of audit.

2.3 SAP Screen Elements

New let us familiarize with the screen elements of SAP. this will make the navigation easy.
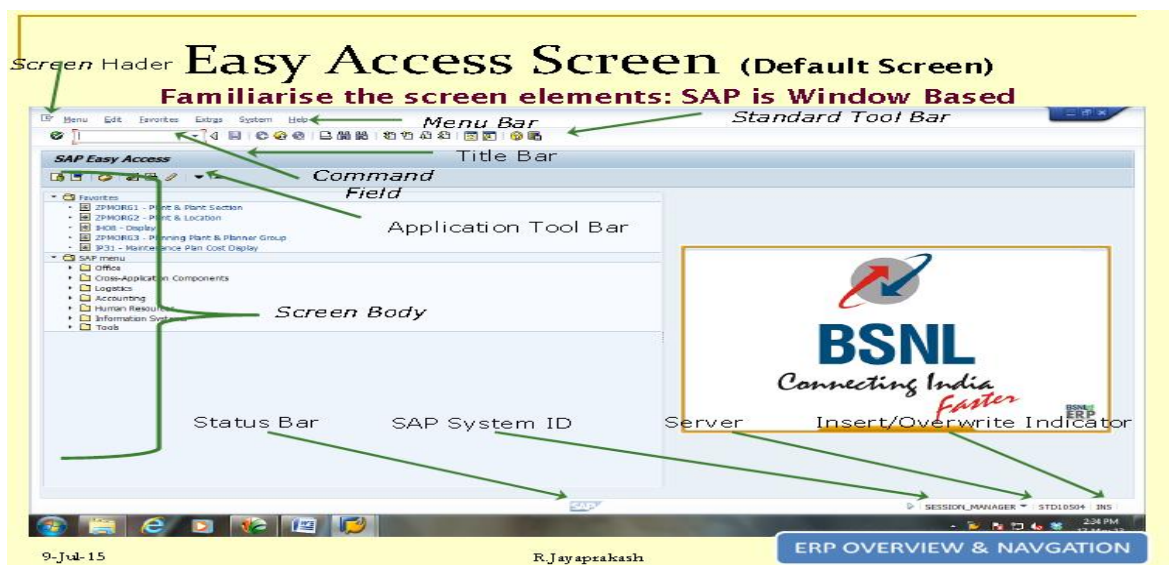
Screenshot 2.5: SAP Default Screen Elements

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2.4 SAP Menu

SAP Menu is used to group all Transaction Codes / Applications. The SAP Menu can be expanded and collapse menus in the navigation area by choosing the dropdown arrows to the left of the menu items. To open an application in the navigation area, Double-Click the node.

Menu can be:
- ■ **SAP Standard Menu:** Displays the standard menu of SAP regardless of the authorization level of the user.
- ■ **SAP User Menu:** Displays only the functions, which the user is authorized are displayed.
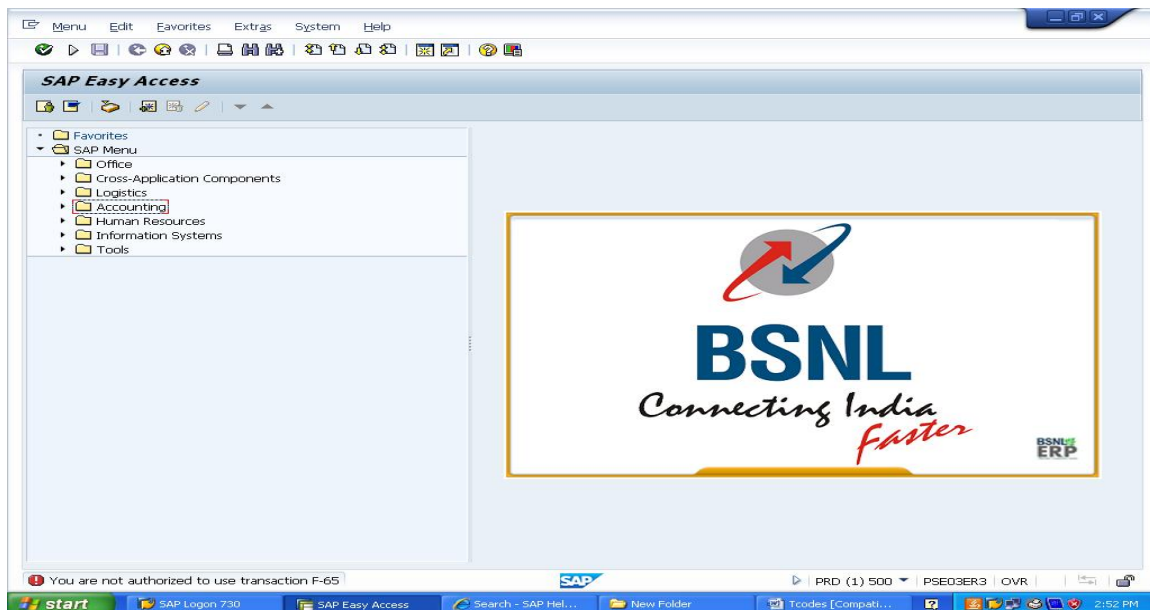
Screenshot 2.6: SAP Standard Menu
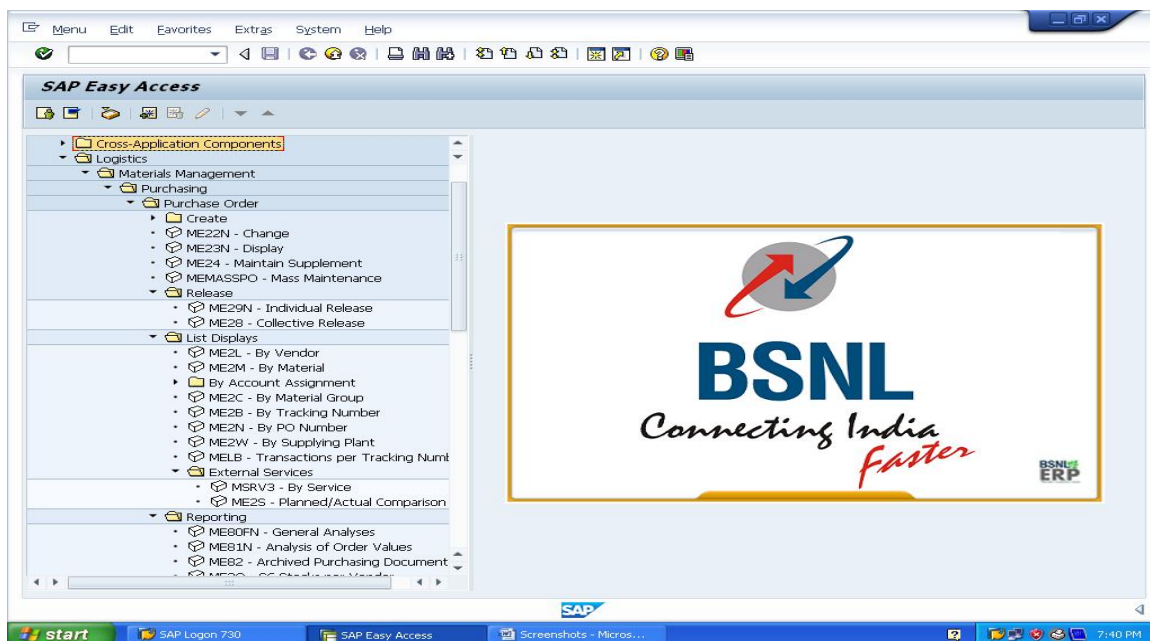
Screenshot 2.7: SAP Sub Menu (collapsed)

2.5 SAP Icons
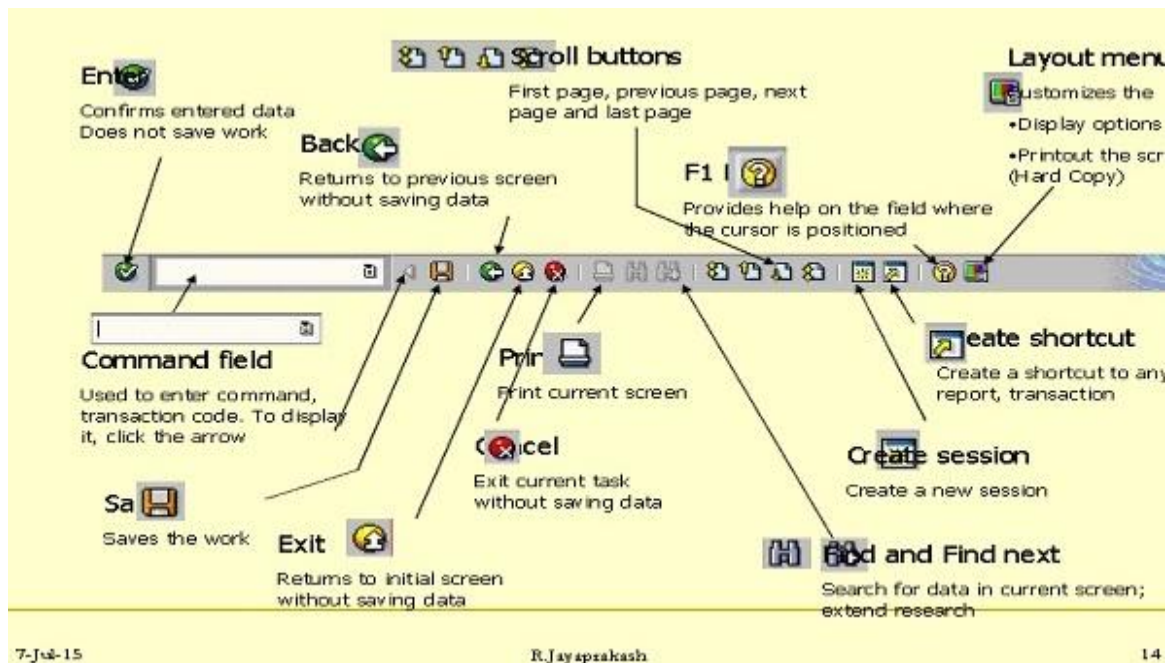
Screenshot 2.8: SAP Icons

2.6 SAP Session

When we sign onto SAP R/3, we create a 'session'. Now we are on a SAP session. We can have more than one session active at the same time. We can 'open' a new session any time and switch between sessions without losing data in the existing sessions.

A session is like a window within SAP

Opening up a new session allows you to work on more than one thing at the same time. You can have up to six sessions running simultaneously.

2.6.1 Creating a new Session

> **Create a New Session**

(i) Using menu bar icon

Screenshot 2.9: Create Session- Menu bar

(ii) Using Menu

System> Create Session or Select the Create Session button from the standard toolbar

Screenshot 2.10: Create session using SAP Menu

(iii) Using Fast Path Field

Type /O before the transaction code and hit Enter. We will be taken directly to the new transaction in a new session without closing what we were working on.

Screenshot 2.11: Create session using Fast Path field

2.6.2 Switching between Sessions

Click the session represented by a button at the bottom of the screen, just like we do for any MS windows program.

Screenshot 2.12: Switching between sessions

2.6.3 Ending a Session

Save your work before you close the session.
From the menu bar choose System> End Session

Screenshot 2.13: Ending a session

2.7 Interaction with SAP- Transaction Codes

We can interact with SAP database are carried through 'transactions'. A transaction is an operation that lets a user make changes to a database. All the transactions have an associated transaction code. It is a four character code (Alpha Numeric) associated with a SAP task. There are three ways to execute a transaction code:

> The full list of transaction codes is maintained in the tables **TSTC** and **TSTCT** which can be accessed

- **Command Field**   : Enter the transaction code in the command field
- **Favorites**   : Double click the transaction code from the 'Favorite' folder
- **SAP menus**   : Double click the transaction code in the SAP menu

T/code in command Field

Screenshot 2.14: Transaction Code in Command Field

T/Code in SAP Menu
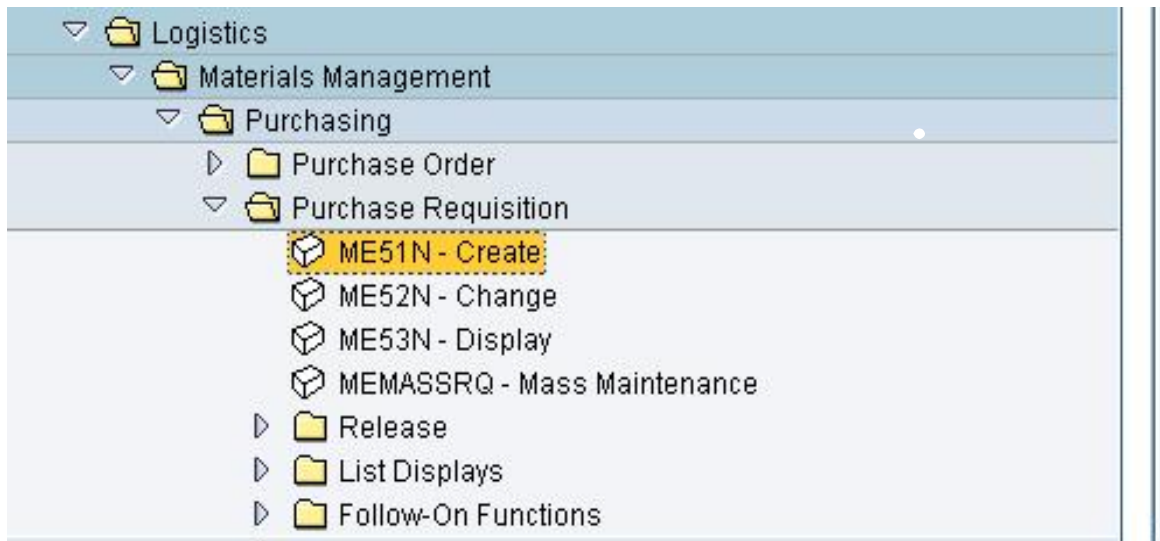
Screenshot 2.15: Transaction Code in SAP Menu

Type /N before the transaction code to move from one transaction to another.

2.7.1 Display Technical Names

SAP menu will show both the transaction name and the transaction code. To view the transaction code

Click Extras is the top menu bar, click Settings and in the next screen select 'Display Technical Name Checkbox'
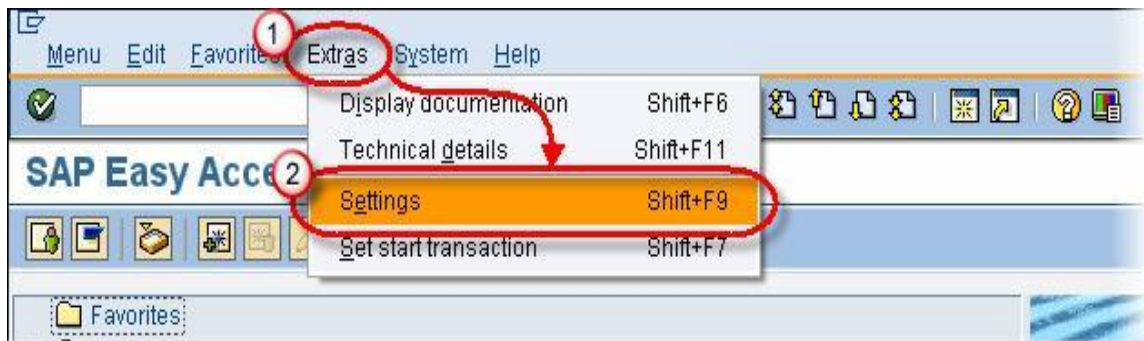
Screenshot 2.16: Technical Names

Screenshot 2.17: Technical names

2.8 Navigation in SAP

We have logged on to SAP and familiarized with the screen elements. Now let us move around SAP. There are two ways to move around:

■ **SAP Menu:** By selecting options from the application menus and submenus. This allows users to navigate and choose from the available functions to perform their tasks without the need to memorize keyboard combinations or transactions codes. Selecting options is just like any other typical windows application: just drag around the menus and click the function you want to start (Ref fig 2.15).

■ **Transaction Code:** Another way to move around is by entering transaction codes in the command field. We can go directly to a task without navigating through the application menus. We have already learnt the three ways to execute a transaction code.

Click here to open the Command Field
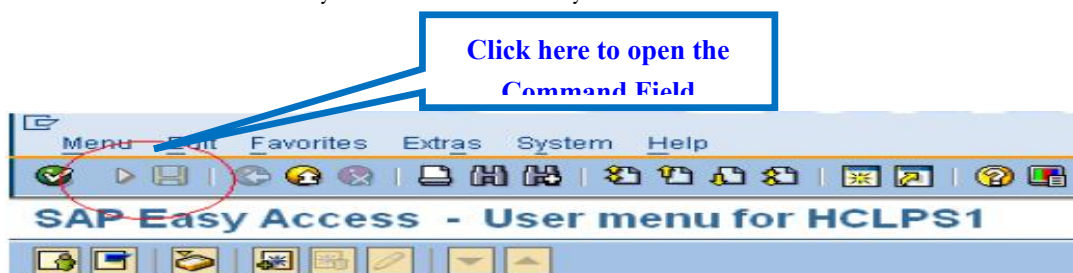
Screenshot 2.19: Command Field is closed
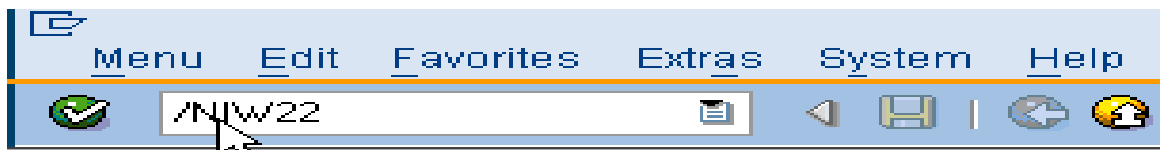
Screenshot 2.20: Command Field is Open
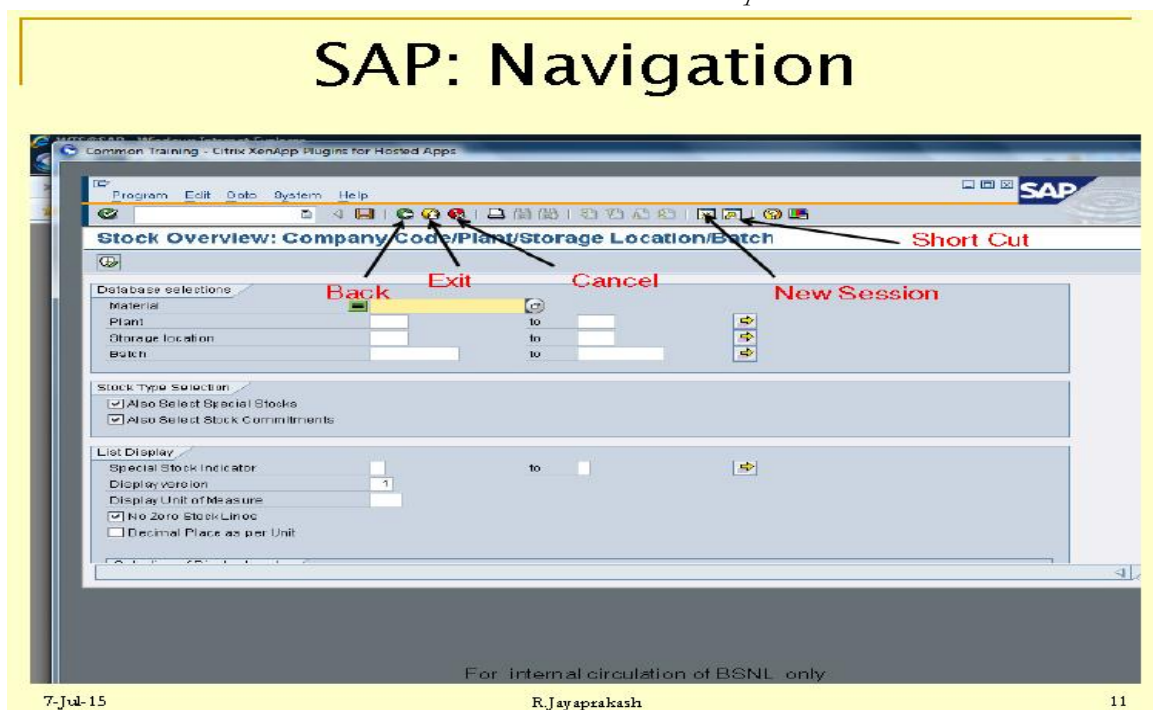
Screenshot 2.21: SAP Navigation

2.9 Fields in SAP Screen

SAP screens will have three field types for data entry:

Required Field	Usually flagged with a tick mark. Data entry is required in this field to perform a task.
Default Field	There will be default entry in the field, but it can be altered
Grey-out Field	No data entry is allowed in this field
Input Entry/Optional Entry	Data entry is optional and not required. Some Optional Entry fields may become required depending on the values entered in other fields.

2.9.1 Match code

If we are not sure about the code to be input in the Required Field, Match code will help us. Match codes allow us to find out the relevant code / value from a list. Just click on the entry field and the Match code appears on the right of the field.

Check the Status in case you can't proceed
If you have any problem while navigating, check the message in the Status Bar at the bottom of the screen. A message will be displayed in the Status Bar. Double-click on the message or click the red circle and a dialogue box pops up that explains the message and what action to take.(The second field defaults to display the system information such as system name, (session number), and (client number).

2.9.2 Dynamic Selection

SAP input screens may not show frields for all selection criteria. SAP Dynamic selection enhances selection criteria that are not included in the standard selection screen. Dynamic selection helps us in narrowing down the selection of the required data from thedatabase. For getting the criteria options in Dynamic Selection, click the icon and select the criteria from the list.

2.10 SAP NetWeaver

The web access to non-executives and Vendor guests to Employees Self Service (ESS) portal is provided through the **SAP NetWeaver** *(eportal.erp.bsnl.co.in)*

Screenshot 2.22: SAP NetWeaver

2.11   Changing the Password

Know the Password Basics

> *The system will disable the password after a specific period as a security measure and prompt the user to renew the password.*

We can use upper case letters or lower case letters in our password (SAP R/3 does not distinguish between upper and lower case letters).
We can use any combination of characters (a .... z, 0.....9 or punctuation marks)

We cannot begin a password with:
?, !, or a blank space, three identical characters (fffce), any sequence of three characters that are contained in our user name (for example, using "bill," if your user name is 99biller)

When all the logon window fields have been filled up as described in the previous section (client, user ID, password assigned by your system administrator and language), pressing the Enter key will display the password change dialog box, like the one shown in Fig. 5−3.

In the New Password field, type in your new password, adhering to the previous rules, and click with the mouse or press the Tab key to move to the Repeat password field; then repeat exactly the same password.

Next, press the Transfer button.

PART.3 AUDIT

3.1 Audit in SAP Environnent

The audits we carry out in BSNL are of three types:
- Financial Audit
- Compliance Audit
- Performance Audit

Audit has the mandatory obligation to audit and report upon the annual accounts (Companies Act 2013) and the revenue and expenditure of the Company (C&AG's (DPC) Act 1971) irrespective whether the accounts are maintained in manual or electronic form.

There is a notion that since SAP is an is an integrated software with sound system based controls, the chances of errors are remote. Like any other system, SAP also is susceptible to errors. The chances or committing mistakes in data entry and selecting the various input codes like G/L account, Posting Key, Document Type, Profit/Cost centers cannot be ruled out. The managerial decisions also leave marks on the transactions in SAP.

The scope and objectives of audit are same in legacy and SAP environment. But the audit methodologies and audit technique may differ. Auditors should not expect manual records in a SAP environment since SAP envisages a paperless environment. Auditors can access the data for any particular Business Area, Profit Centre, Circle or the Company as a whole.

Since all transactions which have financial impacts, happen only through SAP, auditors can conduct system based audit `saving time and effort. Examination of manual records will be required only when auditors fail to find on the required information in SAP.

The SAP modules capture all organizational data except the telecom customer data, TRA billing and Payment data, because these activities are done by Billing & CRM applications. The monthly balances under various telecom revenue heads are only uploaded in SAP.

SAP provides vital inputs for risk analysis, like, revenue and expenditure patterns across different Business Areas, Profit/Cost Centers for different reporting periods which facilitates selection of audit units and focus areas for audit. Analysis of various drill down reports on POs, Inventory, Assets added during the year, debit/credit details, cleared/open items etc. helps in selection of samples for detailed audit.

3.2 Structure of Accounts

3.2.1 Chart of Accounts

Chart of Accounts (CoA) is the group of General Ledger Accounts for posting transactions of an entity for which a full set of financial statements are prepared. Familiarization with the Chart of Accounts is essential for auditors.

There are three types of Chart of Accounts:
- **Operating Chart of Accounts:** It contains all the General Ledger accounts that are used to meet the daily needs in a company. The operating chart of accounts has to be assigned to a company code.
- **Country Chart of Accounts:** It contains a list of all General Ledger accounts that are required to meet the operating country's legal requirements. You can also assign a company chart of account to the company code

> BSNL has only one Chart of Accounts, since it operates only in India and has no group companies.

- **Group Chart of Accounts:** The group chart of accounts contains the G/L accounts that are used by the entire corporate group. This allows the company to provide reports for the entire corporate group.

3.2.2 General Ledger

SAP General Ledger is the core component of SAP which keeps all the transactions in a single database. General Ledger also allows users to store or park incomplete documents temporarily, such as those requiring authorization or approval prior to recording an entry as a final transaction. The number of GL Codes in BSNL has been reduced to less than half in SAP by grouping/deleting of many earlier codes.

3.2.3 SAP Account Types

There are five types of accounts in SAP, each denoted by an alphabet as shown below:

Accounts starting with	Relates to
A	Asset
D	Customers
K	Vendors
M	Material
S	General ledger

3.3 Document

> **Document Date available in a SAP document is actually the date available on the manual document like an Invoice, based on which the transaction has been made in SAP.**

SAP is based on the 'document principle' meaning that a document is created out of every

business transaction in the system. SAP will assign a unique Document number to each document. Document is the connecting link between various business operations.

Documents generated during an accounting year will have unique document numbers. A document has two parts -document header and document line items consists of fields like posting date, document date, entry date, parking date, entered by, parked by, fiscal year, user id, etc. Document line items consist of fields like G/L account, cost objects, document and local currency, etc. A document can have up to 999 line items.

3.3.1 Document Types

Document types are denoted by two digit alphabetic codes.

Type	Description	Type	Description	Type	Description
AA	Asset posting	KP	Account Maintenance	SK	Cash document
AB	Accounting document	KS	Contract Invoice	SU	Adjustment document
AF	Dep. Postings	KV	Raw Material Payment	TP	Transfer Pricing
AN	Net asset posting	KW	Contractor Payment	TR	Travel Accounting
BA	BRS Document Type	KX	Transporter Payment	UE	Data transfer
CH	Contract settlement	KY	Stores Payment	UR	Data Transfer Vendor
CO	CO Document	KZ	Vendor payment	RV	Billing doc.transfer
DA	Customer document	LD	Legacy Document	WA	Goods issue
DB	Customer Bank Guarantee	ML	ML settlement	WE	Goods receipt
DC	Customer Document	KP	Account maintenance	WI	Inventory document
DK	Customer Credit Memo	KQ	Transport Invoice	WL	Goods issue/delivery
DG	Customer credit memo	KR	Vendor invoice	WN	Net Goods Receipt
DR	Customer invoice	KZ	Vendor payment	ZB	Bank Dep by CSC,
DS	Customer Refund	PR	Price change	ZC	PMS Collection
DY	Customer Collection	PY	HR Posting	ZD	PMS Collec. Reverse,
DZ	Customer payment	R1	Revenue- Flash Post	ZE	Reverse Bank DepCSC,
ED	Excise Invoice	R2	Revenue-Final Post	ZI	Inter CO Clearing
EU	Euro rounding diff.	RA	Sub.Credit Memo Statement	ZK	Cash Document
EX	External number	RB	Reserve for Bad Debt	ZP	Payment posting
FR	Fuel Vendor Invoice	RE	Invoice – gross	ZR	Bank reconciliation

KA	Vendor document	RN	Invoice – net	ZS	Payment by check
KB	Vendor BG	RT	Invoice - Retention	ZT	Telecom Refund Post
KC	Debit Memo	RV	Billing doc. transfer	ZV	Payment clearing
KD	Credit memo	SA	G/L account document		
KN	Net Vendors	SB	G/L account posting		

Documents: Relevance in Audit

- *Document establishes the link between the transactions. It contain information on the GL code involved, document date, entry date, posting date, who carried out the transaction, date and time of the transaction etc. H form hence important evidence.*
- *Document Type will indicate the nature of transaction. It also helps us in narrowing down our selection. For example, if we want to display all vendor payment documents we can use the Document type KR*

3.4 Posting Keys

Posting keys are 2 digit numeric codes which controls how the line item is entered and processed in SAP.   Posting Keys are defined at the Client level and will be uniform for all Company Codes under the Client in SAP Users have to specify a posting key before entering a line item.

The Posting Key decides:

■ whether it is a debit or credit
■ the account type to which it is posted   G/L, Customer, Vendor, Assets, Material)
■ How data you post is processed
■ How the system updates the data you enter

Posting Keys: Relevance in Audit

Posting Keys will help the auditors to know the nature of any transaction in SAP. It also helps to detect exceptional transactions and rectification entries for further probe. Eg. We expect only credits in a sale account for which the Posting key is 50.   A Posting key 40 in a Sales Account indicates a Sales Return.

The common Posting Keys used are given in the table below:

Posting Key	Posting key name	A/c type	D/C	Posting Key	Posting key name	A/c type	D/C
1	Invoice	C	D	31	Invoice	V	C
2	Reverse credit memo	C	D	32	Reverse credit memo	V	C
3	Bank charges	C	D	34	Other payables	V	C
4	Other receivables	C	D	35	Incoming payment	V	C

5	Outgoing payment	C	D	36	Payment difference	V	C
6	Payment difference	C	D	37	Other clearing	V	C
7	Other clearing	C	D	38	Payment clearing	V	C
8	Payment clearing	C	D	39	Special G/L credit	V	C
9	Special G/L debit	C	D	40	Debit entry	G	D
11	Credit memo	C	C	50	Credit entry	G	C
12	Reverse invoice	C	C	70	Debit asset	A	D
13	Reverse charges	C	C	75	Credit asset	A	C
14	Other payables	C	C	80	Stock initial entry	G	D
15	Incoming payment	C	C	81	Costs	G	D
16	Payment difference	C	C	83	Price difference	G	D
17	Other clearing	C	C	84	Consumption	G	D
18	Payment clearing	C	C	85	Change in stock	G	D
19	Special G/L credit	C	C	86	GR/IR debit	G	D
21	Credit memo	V	D	89	Stock inward movement	M	D
22	Reverse invoice	V	D	90	Stock initial entry	G	C
24	Other receivables	V	D	91	Costs	G	C
25	Outgoing payment	V	D	93	Price difference	G	C
26	Payment difference	V	D	94	Consumption	G	C
27	Clearing	V	D	95	Change in stock	G	C
28	Payment clearing	V	D	96	GR/IR credit	G	C
29	Special G/L debit	V	D	99	Stock outward movement	M	C

3.5 Date Types in SAP

For any transaction in SAP, there are following three types of date are indicated:

Document date	The date indicated in the supporting document (Bill/Invoice) for which the transaction is made. This is manually made.
Entry date	The date on which the transaction is entered in the system. The date will be the server date.
Posting date	The date on which entry is posted to the ledger or accounting date. This is manually made

Normally, Entry date and Posting date are the same. SAP allows Posting Date which is earlier to or later than the Entry Date.

3.6 Hold and Park

After making the entries, SAP offer the following options to the user:

- **Post it immediately**: Posting the document immediately is the normal practice in SAP. Posting will update the accounts.
- **'Hold' the document**: It is for short term and is used when transaction Dr or Cr is uncertain and generally it is used for external purpose. Holding will not update the accounts.

- **'Park' the document**: Parking the document means after the document (invoices, credit memos) is entered in SAP, it is not immediately posted in SAP, but kept pending for some time for detailed checks before posting it. In case of payments to 'One Time Vendors', the person who enters the document will park it and the same is cleared and posted by his supervisory officer as an internal control mechanism against fraudulent payments. It is for longer period generally used for internal purpose. Parking will not update the accounts.

> ### Date Types & Hold/Park: Relevance in Audit
>
> *Date types and the Hold/Park details available in the SAP document and the document header will help the auditors in identifying parked or hold items so that further examination can be made on the justification for the same. Normal reasons are requirement of further verification, want of approval by higher authority, non-availability of fund etc. The document dates also reveal delays in entering the transaction and its actual posting in the General ledger. Auditors can also verify whether changes in SAP have been made at the instance of audit or not.*

3.7 Segment Reporting

As per the requirement of 'The Reporting System on Accounting Separation Regulations 2016" of TRAI, 2016", Telecom Service Providers are required to generate the Accounting Separation Statements in the following segments:

- Telecom Service wise separation
- Licensed Service/Geographical area of Operation wise separation

In addition, there is reporting of Network Element wise cost, Support Functions and Department Costs and Non-financial Reports.

SAP allows preparation of financial accounts for the Company as whole, for each Telecom Circle and for each Business Area (SSA). The various functional units are denoted by the following codes:

Telecom Circles codes are given in the table below:

BA Code	Name of the Business Area	BA Code	Name of the Business Area
ZBA1010	Business Area Corporate Office	ZBA1035	Business Area Kolata Maint. District
ZBA1011	Business Area Andaman & Nicobar	ZBA1036	Business Area Chennai Maint. District
ZBA1012	Business Area Andhra Pradesh Telecom	ZBA1050	Business Area ETR
ZBA1013	Business Area Assam Telecom Circ	ZBA1051	Business Area WTR
ZBA1014	Business Area Bihar Telecom Circ	ZBA1052	Business Area NTR
ZBA1015	Business Area Chhattisgarh Telecom	ZBA1053	Business Area STR
ZBA1016	Business Area Gujarat Telecom	ZBA1060	Business Area ETP
ZBA1017	Business Area Haryana Telecom	ZBA1061	Business Area WTP
ZBA1018	Business Area Himachal Pradesh Telecom	ZBA1062	Business Area NTP
ZBA1019	Business Area Jammu & Kashmir Telecom	ZBA1063	Business Area STP
ZBA1020	Business Area Jharkhand Telecom	ZBA1064	Business Area NETF
ZBA1021	Business Area Karnataka Telecom	ZBA1070	Business Area TF Mumbai
ZBA1022	Business Area Kerala Telecom	ZBA1071	Business Area TF Jabalpur
ZBA1023	Business Area Madhya Pradesh Telecom	ZBA1072	Busniess Area TF Kolkata
ZBA1024	Business Area Maharashtra Telecom	ZBA1080	Business Area ALTTC
ZBA1025	Business Area NE - I Telecom	ZBA1081	Business Area BRBRA ITT
ZBA1026	Business Area NE-II Telecom	ZBA1082	Business Area NATFM IT
ZBA1027	Business Area Orissa Telecom	ZBA1090	Business Area CPAO ITI BGLR
ZBA1028	Business Area Punjab Telecom	ZBA1091	Business Area BBAND NETWORK
ZBA1029	Business Area Rajasthan Telecom	ZBA1092	Business Area NCES TU
ZBA1030	Business Area Tamilnadu Telecom	ZBA1093	Business Area TECH & DEV
ZBA1031	Business Area UP (East) Telecom	ZBA1094	Business Area QUALITY ASSU
ZBA1032	Business Area UP (West) Telecom	ZBA1095	Business Area TEL. STORES
ZBA1033	Business Area Uttaranchal Telecom	ZBABSNL	BSNL BUSNIESS AREAS
ZBA1034	Business Area West Bengal Telecom		

BSNL as a whole   : Company Code 1100

The original Business Area codes will continue for SSAs.

3.8 Cost Centre & Profit Centre

In SAP all expenditure are accounted against Cost Centres and all revenue booked against Profit Centre. Cost/Profit Centres facilitate segment reporting.

3.8.1 List of Cost Centers in BSNL

Cost centre will be used to monitor and trace who incurred a specific cost within the organization. Cost centers are created according to various criteria including functional considerations, allocation criteria, activities provided or according to their physical location or management area. Every cost centre is linked to a –i) Company code, ii) Profit Centre, and iii) Business Area.

The Cost Centre will be a **seven digit number**, the first four digits will be the Business Area code, the 5th digit will be 1 -Network element, 2 -Line of business Segments) like CFA, Broadband, etc., and 3 –Functional Department like Finance Department, Admin Department and the last two digits will be running serial number.

Last Three Number of Cost Centre	Description (Short Text in cost centre master)	Last Three Number of Cost Centre	Description (Short Text in cost centre master)	Last Three Number of Cost Centre	Description (Short Text in cost centre master)
101	CDMA-RADIO ACCESS NW	130	OUTDOOR PLANT	157	CPE - BASIC SERVICES
102	CFA TRANSMISSION	131	TELEGRAPH	158	TANDEM- TAX SWITCH
103	TOWER –CM	132	NLD - TRANSMISSION	159	CFA-MEDIA GATEWAY
105	GSM-RADIO ACCESS NW	133	TOWER -USO	160	CPE-BROADBAND
106	CORE-CDMA	134	VSAT	161	DSLAM
107	CORE-BB	135	WAP	162	BB-MuX-SWITCH
108	CORE-CFA ACESS VOICE	136	3G	163	NLD-MEDIA GATEWAY
109	CORE-GSM	137	NMS TAX - CFA	164	ILD-MEDIA GATEWAY
110	CORE-MPLS	138	MLLN	165	DARK FIBRE
111	CORE-WIMAX	139	WIMAX-RADIO ACESS NW	201	CONSUMER FIXED ACESS
112	DSPT	140	CM - TRANSMIS. MEDIA	202	CONSUMER MOBILITY
114	ELECTRICAL INFRA-CFA	141	PMRTS	203	LEASED CIRCUITS

115	ELECTRICAL INFRAS-CM	142	GMPCS	206	BROADBAND
116	ELECT. INFRA-TRANS	143	SMS SERVICE	301	ADMINISTRATION
117	FTTH -	144	NMS – CM	302	BILLING – CFA
118	ILD Gateway	145	VAS APPL. SERVER-GSM	303	CIVIL DIVISION
119	IN-CM	146	DEDICATED SERVERS-BB	304	ELECTRICAL DIVISION
120	IN-FIXED ACCESS	147	CABLE LANDING STATON	305	FINANCE & ACCOUNTS
121	IT SUPPORT-CFA BSS	148	ELECT INFRA TOWER-CM	306	HUMAN RESOURCE DEVL.
122	IT SUPPORT-CFA OSS	149	INTERNET DATA CENTER	308	BOARD OF DIRECTOR
123	IT SUPPORT-CM BSS	150	CPE - WIMAX	309	MARKET BUSI. DEV-CFA
124	IT SUPPORT-CM OSS	151	IN – CDMA	311	PLAN,PURCHASE& STORE
126	LOCATION BASED SERV.	152	VAS - CDMA	314	MARKET. BUSI. DEV-CM
127	LEVEL 1 TAX	153	CPE - CDMA	315	BILLING – CM
128	LOCAL LOOP -CIRCUITS	154	WLL - CORE	316	SALES – CM
129	MMS	155	WLL - ACCESS	317	CALL CENTER – CFA
		156	CPE – WLL	318	CALL CENTER – CM

3.8.2 List of Profit Centers

There are only seven Profit Centers in BSNL. The list is furnished below:

Profit Centre	Code
Consumer Fixed Access	10000
Broadband	11000
Consumer Mobility	20000
Leased Circuits	30000
Towers-Consumer Mobility	40000
Towers-USO	41000
External Projects	90000

Cost & Profit Centers: Relevance in Audit

- *Auditors can view segment-wise financial data since the expenditure/revenue are allocated to the respective profit centres in SAP.*
- *Auditors can evaluate segment-wise performance of the Company during a given period.*
- *Auditors can evaluate the expenditure pattern in various functional/ service areas.*

3.9 Cash Journal

Cash journal is an online cash book in SAP system. It allows the user to post cash documents (like expenses, cash receipts, cash withdrawal from bank etc.). It calculates the balance of cash remaining on hand each time a cash expense and cash receipt is posted.

3.10 Fiscal Year & Posting Period

A 'fiscal year' is the accounting period, which normally spreads over 12 months corresponding to the period for which annual financial statements are prepared. In BSNL SAP, fiscal year 2018 means financial year 2018-19. The fiscal year has 12 posting periods corresponding to the calendar month.

In addition to the 12 posting periods, 4 special periods from April to May of the succeeding fiscal year are also defined in SAP to facilitate year-end closing activities.

3.11 Options for Auditing in SAP

There are two options for auditors

3.11.1 Option 1: Through Audit Information System (AIS)

Audit Information System (AIS) is an Embedded Audit Module (EAM) for audit. EAMs are programs written and complied within an application to perform audit procedures while an application is in operation and may be run only when activated or on a routine basis. EAM enables auditors to monitor and analyze transactions at various levels of the application. It has the ability to identify all unusual transactions for auditor's evaluation. This is done in form of exception reporting. Exception reporting is the selection and highlighting of data that are in some way different or critical. Using exception reporting auditors can extracts data from the audit file to another file using specified criteria.

Note: This module is not available in BSNL

3.11.2 Option 2: Through Access Privilege

Audit is given access with 'Display' Privilege. The Username and Password are allotted by the DBA. The password will automatically become inactive after 30 days and system will prompt for new password. Auditors can log on to SAP from 'Program menu' using short cut icon (refer part 8) and access the required data and generate reports using the relevant 'Transaction Codes'/Reports or SAP Menu.

The SAP menu folder 'Information System' contains T/Codes to view information and standard Reports which will be useful in audit.

3.11.3 Auditing with Reports

As auditors, we have to extract, collect, format and analyze the financial data from SAP. This can be carried out through Reports.

We need not program any reports since SAP has thousands of pre-programmed reports. A report can be executed through menu functions or through the Report Codes

> ***Reports*** **in the SAP R/3 system are ABAP programs whose function is to look up information in the database and display it or print it.**

The general reporting facilities of the R/3 system can be found under the System-Services-Reporting menu or using **Transaction code SA38.**

The names of most of the standard report start with letter R. Customer created reports start with letter Y or Z. Reports are grouped in classes, for example, sales reports, stock movements, and projects.

> **A *report* is the program itself, and a *list* is the result (the output) of the report.**

3.11.4 Access the Reports

There are two methods (i) through the SAP Menu (ii) through the Report Codes

i) Through SAP Menu

In SAP, Each application Menu contains a sub menu called 'Information Systems'. The Information Systems contain many 'Reports', which can be accessed through the SAP Menu.

For example Reports in Accounts Receivable can be accessed through the following path:

Accounting-Financial Accounting-General Ledger-Accounts Receivable-Information System-Reports for Accounts Receivable-Customer Balance-

ii) Through Command Field

The Reports can be executed through the command field.

Examples of Reports
S_ALR_87012167: Accounts Receivable Information System
S_ALR_87012172: Customer Balance in Local Currency
S_ALR_87012186: Customer Sales
S_ALR_87012169: Transaction Figures-Account Balance
S_ALR_87012170: Transaction Figures-Special Sales
S_ALR_87012171: Transaction Figures-Sales

3.11.5 To find Report Names, from the Reporting Screen

Select Utilities. Find Program from the menu. The system shows the ABAP program directory search screen. The report search screen (titled ABAP Program Directory) appears. To start the report, enter the report name in the field and click on the Execute button.

Most reports have selection criteria to delimit the scope of the search and the expected results. Some reports, however, do not have selection criteria, so when executing the report, the results are shown immediately. If the report includes selection criteria, the corresponding screen appears, where users must enter the criteria they want to use for the report results. Criteria are the search terms, and the use of wildcards is allowed.

Once the criteria are entered, press the Execute button again or select Program Execute in background from the main menu to submit the report as a background job.

A common way to automatically enter selection criteria is with the use of variants. A variant is a collection of predefined criteria to use in reports

Searching can be done with T/Code SA38 using the first 2 or 3 alphabets in the Report name.

Naming Convention of Reports in SAP

1st Letter		3rt Letter	
R	Standard Reports	RFB	Document Reports
Y, Z	Customized Reports	RFK	Vendor Reports
2nd Letter		RFD	Customer Reports
F	Financial Accounting	RFS	GL Reports
P	Human Resources	**4th and following letters**	
M	Materials	RFSKVZ00	GL Account List
V	Sales	RFKEPL00	List of vendor line items
A	Fixed Asset Reports	RAABGA01	Asset Retirement
S	Basis Module and System Applications		

3.11.6 Report Variant

Sometimes you may feel that a particular report needs to save for future purpose. You can create a Report Variant with the values you entered in to the selection fields and click Save as variant button 🖫 .

Type the name of the variant, give a description to identify the Report Variant and save 🖫.

To recall a Report Variant, click the Get Variant button 🔁 on the report entry field. A list of Report Variants is displayed and you can select your Report Variant and click the Execute icon 🕒 to run the Report.

3.12 Note Sheets in SAP: Auditors will be very much interested in note sheets.

Note sheets can be maintained in SAP also. Access to the note sheets depends on the authorization level

> ***Note Sheets*** *can be created in SAP using the transaction code 'ZPS_Notesheet'. Then enter the WBS Element for which note sheet need to created/update. Enter the HRMS number to whom it should be sent (without the first digit of the HRMS number). Enter the comments in the Note sheet and click on to sent button. Note sheet will be available in SAP inbox of the person to whom it was sent to.*

3.13 Audit Trails and Audit Evidence in SAP

Audit Trail is a sequence of activities which will help the auditor in either in paper form or in digital form. BSNL envisages a paperless environment in SAP. Auditors have to look for audit trails within SAP. Auditors should have knowledge about the process flow in respect of various activities in each module. SAP Documents will help the auditors in understanding the links between transactions.

Audit Evidence is something which substantiates an audit finding. In SAP environment, audit evidences are in the form of screenshots of financial statements, TB, schedules, GL views, stock reports etc which carry the date and time stamps. The SAP document is important audit evidence since it contains important details about the transactions. Information generated through T/Codes and Reports can be extracted in to Excel/Word document (Ref; Part 9 of the Handbook for details).

PART.4: Financial Statements

4.1 Supplementary Audit of Financial Statement in BSNL

The objective of financial statement audit is to express, on the basis of sufficient and appropriate audit evidence, an objective opinion on whether financial statements present a true and fair view of the financial position, results of operations and changes in financial position of the organization in accordance with generally accepted accounting principles. Supplementary Audit by C&AG under Section 143(6) of Companies Act 2013, includes audit checks on general principles of accuracy, reliability, disclosure, consistency, materiality and conformity with the format and content of the financial statements as required by law and by standard practices, evaluation of adequacy and effectiveness of internal control systems and performance of audit done by statutory auditors.

4.2 FICO Module

Financial accounting and reporting is done by the FICO (Finance and Controlling) module of SAP. FI records all financial transactions that are posted by an entity and produce financial statements. CO manages and controls the master data that covers cost and profit centers, internal orders, and other cost elements and functional areas.

FICO has the following sub-modules:

FI	CO
General Ledger accounting	Cost Element Accounting
Accounts Receivables	Cost Center Accounting
Accounts Payable	Profit Center Accounting
Asset Accounting	Internal Orders
Bank Accounting	Product Cost Controlling
Consolidation	Profitability Analysis
Special Purpose Ledger	
Travel Management	

Transactions are initially recorded in the sub-module and they are reconciled with the General Ledgers in real time. TB can be generated at any time and it will be always balanced. Transactions recoded directly in General Ledger Accounting include journal vouchers (JVs) which are posted to adjust or correct transactions and reversals.

4.2.1 GL Codes

BSNL SAP GL(General Ledger) Code has a length of 7 digits

- SAP GL code starting with 1 indicates Liabilities & Provisions ('11' – Shareholder Funds, '12' – Loan Fund and '13' – Current Liabilities and Provisions).

- SAP GL code starting with 2 indicates Fixed assets (First Two Digits - 21), Investment ('22'), AUC(CWIP), Debtors('24'), Inventory ('23') and other Current Assets ('26').
- SAP GL code starting with 4 indicates Revenue and Income.
- SAP GL code starting with 5 indicates Expenditure and Depreciation.
- SAP GL code starting with 6 indicates NOFN Project GLs (Balance Sheet as well as Profit & Loss Account).
- SAP GL code starting with 9 indicates Remittance and Data Migration GL Codes.
- SAP GL code for Cash/Bank is 10 digits and starts with 25.

4.3 Financial Statements in SAP

SAP has standard Financial Statement Versions (FSV) for all countries. Companies can select the country specific standard FSV or create a new FSV as per organizational requirement.

4.3.1 Comparison of Financial Statements in SAP with signed copies

This is a basic check during certification audit. The Financial statements certified by the Statutory Auditor should be compared with the Financial Statements in SAP. Any discrepancy between the two should be examined.

We can view the Financial Statements Company-wise or Business Area-wise and can compare the same with that of any other financial year/posting period.

4.3.2 Balance Sheet

The Balance Sheet is a statement of the Company's financial position at a specified time (end of month, quarter or year). The balance sheet will show assets and list any liabilities, giving a statement of what the business owes and owns.

Type the T/Code **GR55** in the command bar and press Enter key.
Following window opens. Type **Z030** in the Report Group and click the Execute icon

or press F8

Screenshot 4.1 Execute Report Group

In the next input screen, give the fiscal year, previous year, Company code and specify the period as 0 to 16. In the Business Area cell, type the Circle Business area code (Ref Para 3.7) or select the code by clicking the Business Area cell. A dialogue box appears as below: Click the Set Name cell and click the tick icon at the bottom of the dialogue box..
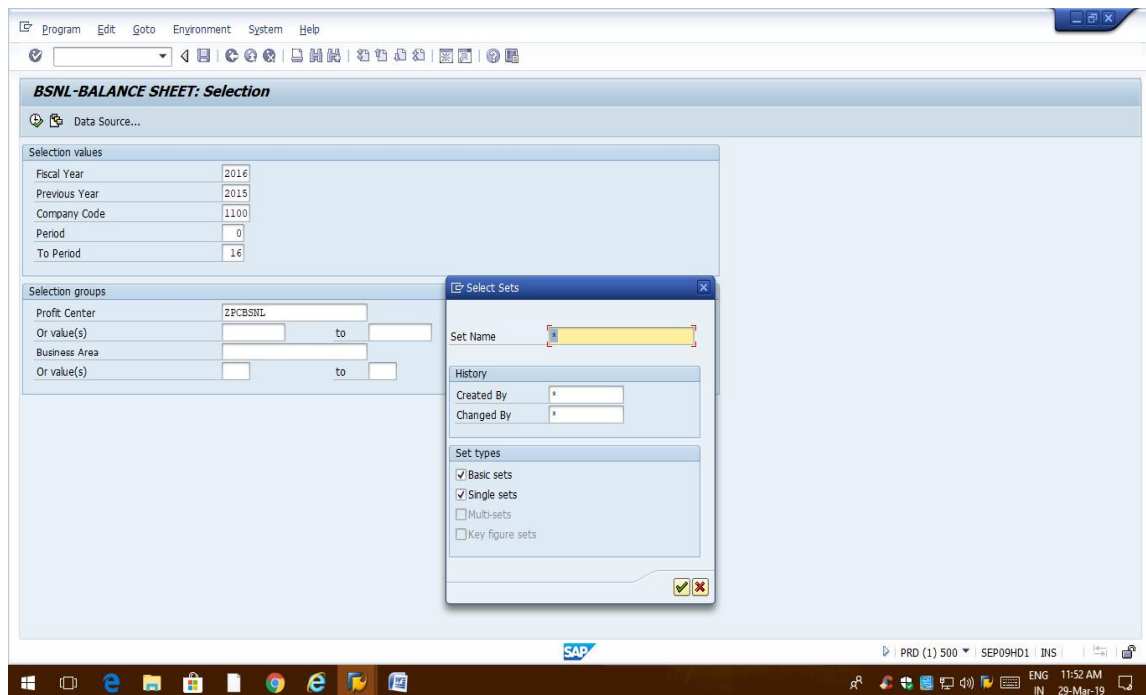
Screenshot 4.2 Balance Sheet: Selection

Select the Circle BA code from the match code as shown below and click the Execute icon or press F8.
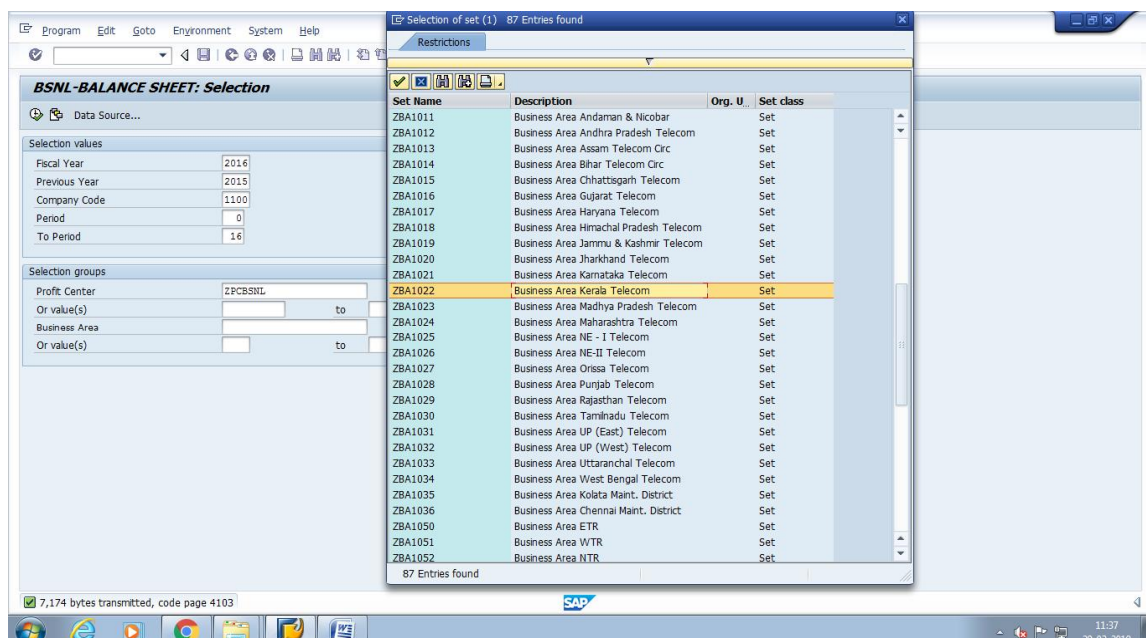
Screenshot 4.2a Balance Sheet: Selection

Note: We can view the Financial Statements, Schedules or TB for any period by changing the posting period.

The Balance Sheet is displayed as below:

Screenshot 4.3 Balance Sheet for Company Code 1022

Profit Center-wise and SSA-wise Balance Sheet

Options to view Profit Center-wise and SSA-wise Balance Sheet are available in the Selection Group on the left side of the window.

Eg: To view the Balance Sheet for profit Center Consumer Mobility, select Profit Centre 20000 'Consumer Mobility'.

The BS in r/o Mobile Segment is displayed as below:

Screenshot 4.4 Balance Sheet for Profit Center 2000

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To view BS of an SSA, click the code for the relevant SSA. Eg Ernakulum SSA Code 2204.

Screenshot 4.5 Balance Sheet for Business Area 2204 Ernakulum

4.3.3 Schedules of Balance Sheet

Schedules are supporting documents of financial statements which give details of various asset & liabilities in the balance sheet and income & expenditure in the Statement of P&L.

T/Code: Type **GR 55** in the command menu and press the Enter key.

In the next window type **Z040** in the Report Group and Execute. A window similar as Fig.4.2 will open. Give the fiscal year, previous year, company code and specify the period 0 to 16. Leave all other boxes blank and Execute.

Screenshot 4.6 Balance Sheet Schedules: Input screen

The Balance Sheet Schedules are displayed in the next window.

Screenshot 4.7 Balance Sheet Schedule

4.3.4 Statement of Profit & Loss

The statement of *Profit* & Loss is a summary of *the revenues and expenses generated by the company over the entire reporting period.*

Type GR 55 in the command box and enter. In the next screen type Z035 in the Report Group and execute.

Screenshot 4.8 Statement of P&L: Input Screen

Statement of P&L is displayed as below:

Screenshot 4.9 Statement of P&L

4.3.5 Schedules of P&L

TCode: GR 55. In the input screen, type **Z045** in the Report Group and execute. Give the fiscal year, previous year, and company code and specify the period 0 to 16. Leave all other boxes blank and Execute.

The P&L Schedules are displayed in the following screen.

Screenshot 4.11 Statement of P&L: Input Screen

4.4 Trial Balance

Trial Balance is a list of closing balances of ledger accounts on a certain date and is the first step towards the preparation of financial statements.

Enter the T/**Code GR55** in the Command Field and press 'Enter'. In the next screen, select enter '**Z001**' as the Report Group and Execute.

Screenshot 4.12: To View TB-Initial Screen

Another selection window will open. Give the fiscal year and Company Code. Specify the period as 16 since SAP allows 4 more months (12+4) for correction/updating the accounts of the financial year.

To view the TB for a specific Profit Center or Business Area, enter the relevant code under Selection Groups.

Screenshot 4.13: To View TB- Selection

Trial Balance is displayed as below:

Screenshot 4.14: Trial Balance

Note:

i) For Profit centre-wise and Business Are-wise TB, select and click the Profit Centre/Business Area on the right side

ii) Click the line item for monthly debit/credit details and for details of individual transactions of a month, click the respective line item.

4.4.1 Drill Down Line Items

Drill down means to move downward through a data hierarchy. It will give useful inputs to the auditor to understand the financial transactions and carry out detailed audit analysis.

We can drill down the line items of Balance Sheets, Statement of P&L, Schedules and Trial Balance. It will give details such as, monthly debits and credits in a particular G/L account, details of individual debits/credits, documents, document header.

Example

How to drill down of a Balance Sheet line item 'Trade payable- Claims Payable on IUC Chages' (See the line item marked in the following screen)

Click the line item, 'Trade Payable'.

Trade Payable is displayed as below:

Screenshot 4.15: Trial Balance

On clicking the line item 'Trade Payable', the following window will open.

Screenshot 4.16: Trial Balance Drill Down

4.4.2 Drill Down to Monthly Debit and Credits

To view the monthly debits and credits under 'Claims payable to IUC Charges', click the line item. The result will be displayed as below:

Screenshot 4.17: Trial Balance Drill Down: Monthly debits and credits

4.4.3:To drill down to transaction level

Eg. Double click the line item for March to display the transactions during the month as shown below:

Screenshot 4.18: Trade payable IUC March Transactions

4.4.4 Display Document (Ref: Para 3.3 formore about Document)

Eg. Highlight the line item for Docment No. 1900458836. Then click the   Icon   for display results (Display Document). The document is displayed as below:

Screenshot 4.19: Document View

To view the **document header**, click the document header icon .
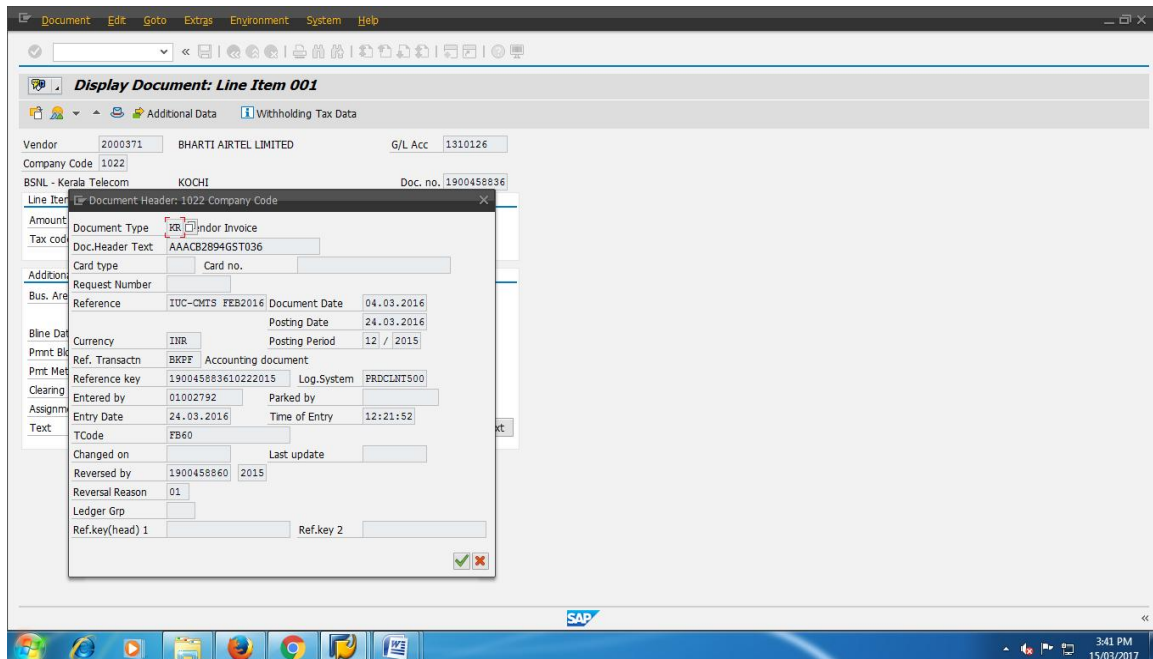
Screenshot 4.20: Document Header

To Display **Document- Data Entry View**, click the icon (call up doc overview)
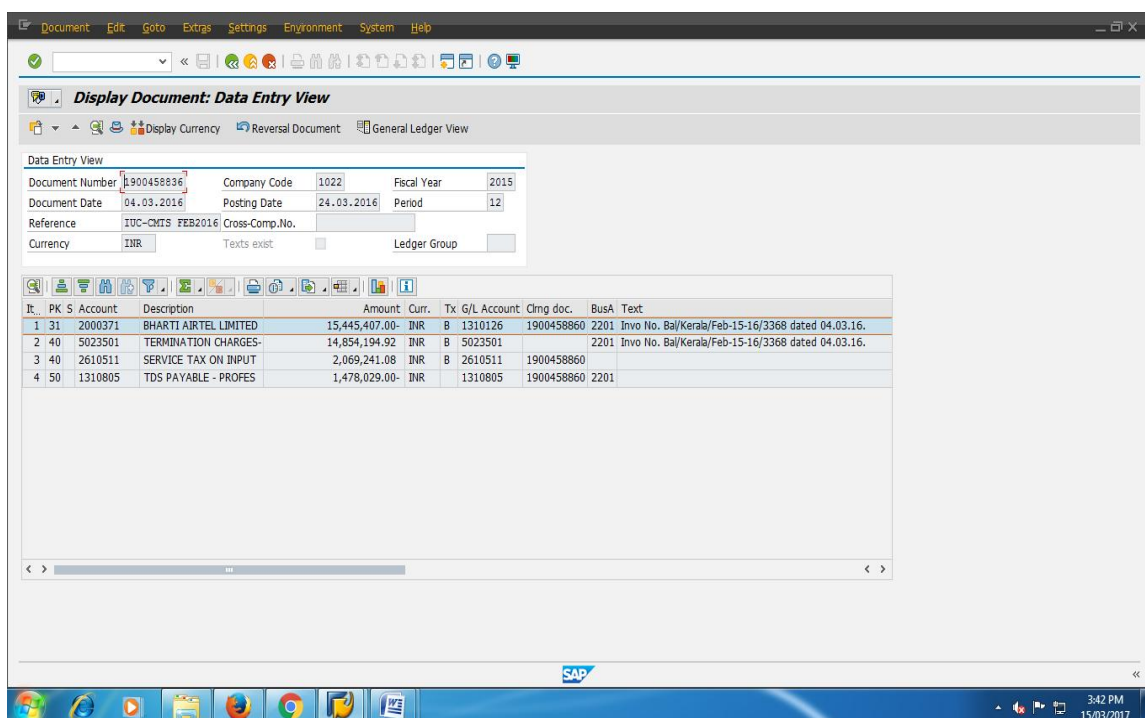
Screenshot 4.21: Data Entry View

To view the **clearing details,** double click the clearing doc number. 190045860.

4.4.5 Display a Particular Document

A Document is created for each business transaction in SAP and it carries a unique Document number.

Auditors can verify a transaction with the document number (Ref Para 3.3 for details on Document)

Transaction Code: FB03

Enter the Document number, Company code and Fiscal year in the input screen below.

Screenshot 4.22: View Document-Input Screen

Press 'Enter' key and the following screen will open. It shows details of the document such as document date, posting date, Posting Key 31 indicate it is an invoice and PK 40 indicate it is a debit entry and the description shows that it is a local purchase of satvision terminatiion box (Ref. Para 3.4 for details on Parking).

Screenshot 4.23: Document- data Entry View

4.4.6 Display Document Header

Press F5 or click the **Document Header** 🖨 button to view the document header. The document type shown is 'ZT' which is Telecom Refund.
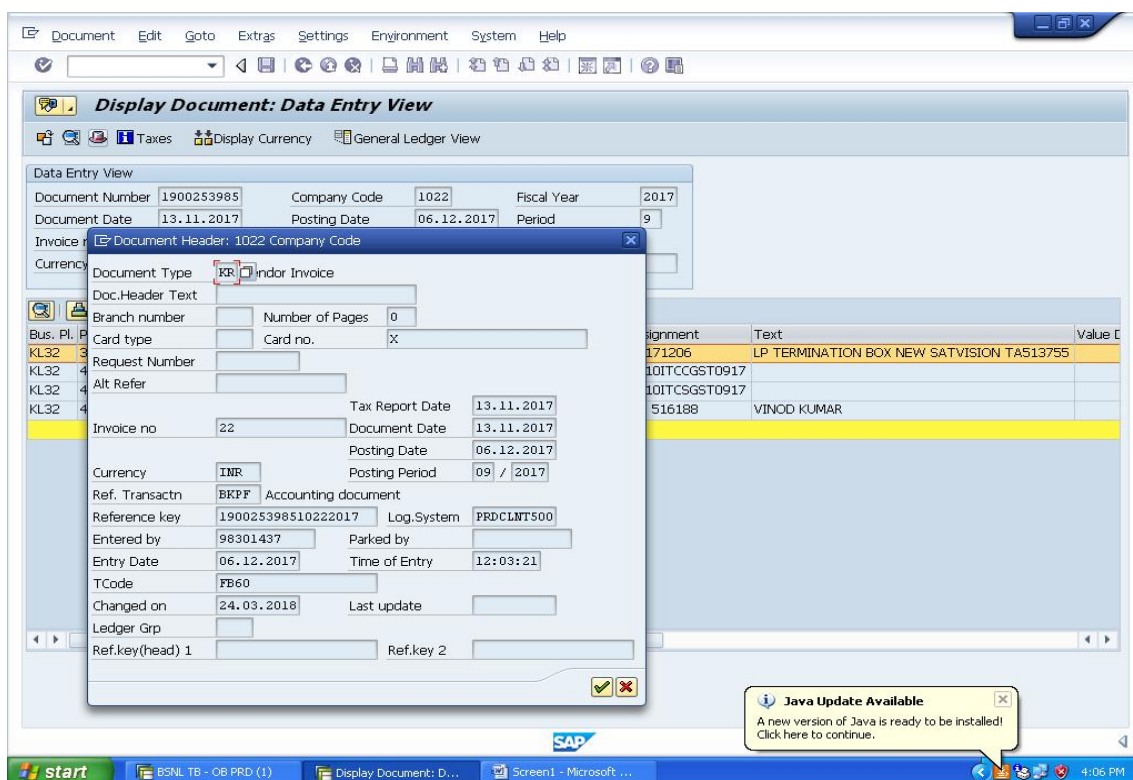
Screenshot 4.24: Document Header

Important Note

In March 2019, the Circle level Company Codes were merged in to a single Company Code 1100 for BSNL as a whole. Separate Codes called Circle Business Area Codes were introduced for Telecom Circles. For SSAs the old Business Area Codes are continued.

Since the handbook was prepared before the above change, the screenshots contain the old Company Code. You may replace the old codes with the new codes as given under Part 3.7.

4.5 Financial Statement Analysis

Financial Statement Analysis is the process of understanding the fundamentals of the Company by reviewing its financial statements (BS, Statement of P&L, Cash Flow). FS Analysis can be made using comparison or ratio/trend analysis.

Analysis of Financial Statement

- **Horizontal Analysis (Trend Analysis):** Focuses on the trends and changes in the financial statements over a period of time Eg. for different posting period or fiscal year). Comparison can also be made Company-wise and Business Area-wise also. It will give insights on how each item changed, why it changed and whether the change is favourable or not. Horizontal analysis of two periods can be done in SAP.

- **Vertical Analysis (Common Size Analysis):** Focuses on analyzing each line item as a percentage of another related line item Eg. Line item on a balance sheet is expressed as a percentage of total assets or liabilities. It will give insight on the relative importance of various items on the financial statements.

4.5.1 Variation Analysis

Variation Analysis is done by Comparing financial data of same year or two year. Such comparisons can be made for Trial Balance, Balance Sheet and Statement of P&L.
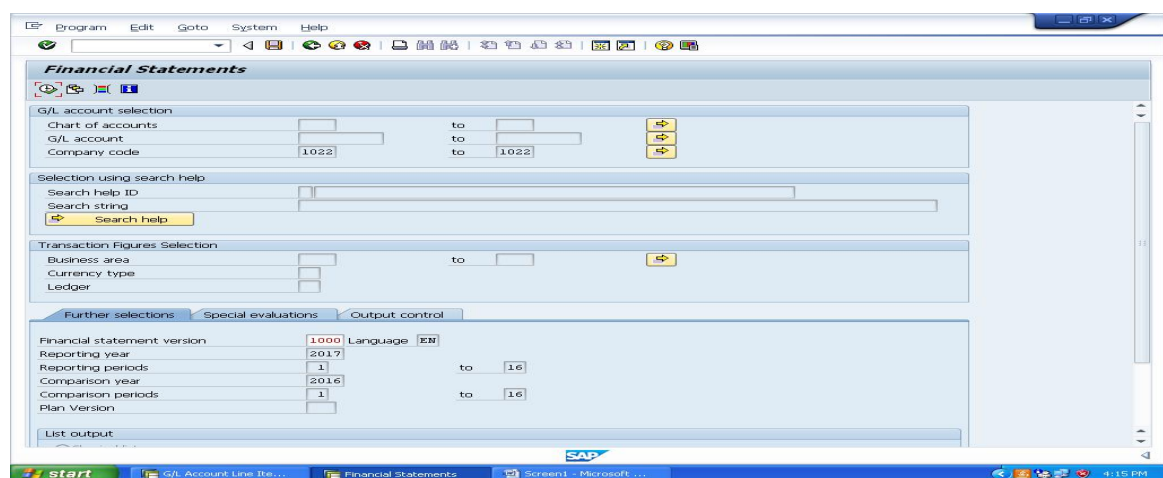
4.5.2   Comparison of Balance Sheets

SAP displays Balance Sheets of two years by default. We can select any Reporting Period and Comparison Period. Comparison can be made for Company-wise and BA-wise. It should be correlated with the geographical coverage, customer-wise, number of staff, number of exchanges etc to arrive at any meaningful audit conclusion.

Comparison can be made for any G/L account or a range of G/L accounts.
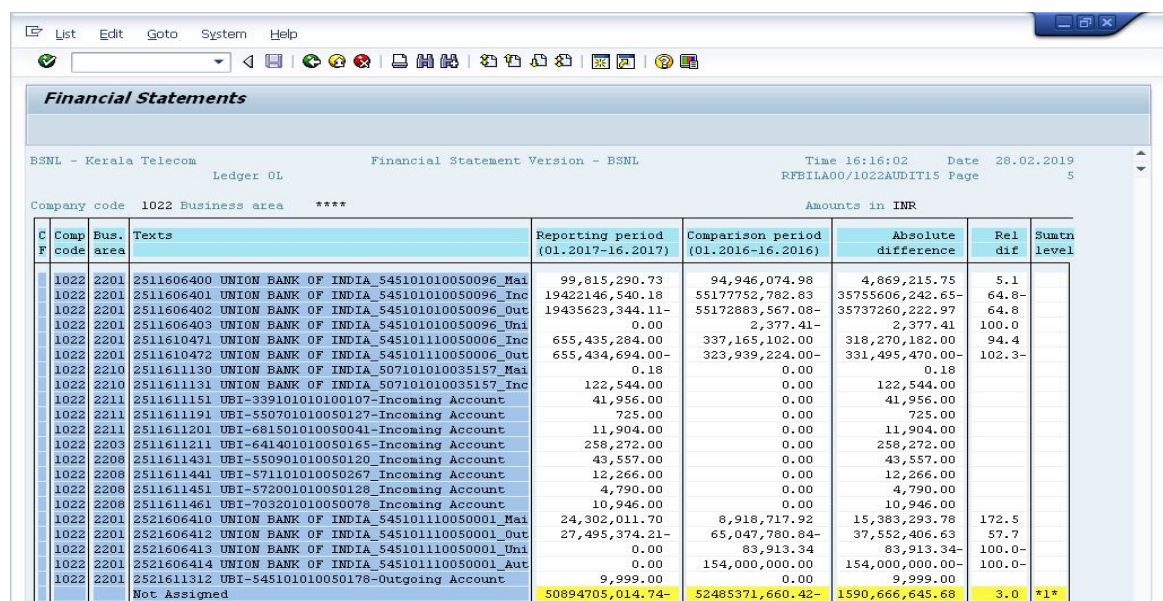
T/Code: S_ALR_87012284

Type the Company Code, Reporting Year and Comparison Year as below:

Screenshot 4.26: Comparison of BS- Input Screen

Result of comparison is displayed as below:

Screenshot 4.27: Comparison of BS

Comparison of two years Bakance Sheet – Last Page

To view Business Area-wise comparison of line item, select the Company Code, BA Codes, Reporting Year and Comparing Year and execute.

Screenshot   4.28: BA-wise cmparison

The result will be displayed as below:

Screenshot 4.29: Comparison of Line Item- BA wise

To compare Balance Sheets of two Business Areas. Eg. BAs 2210 and 2211 for the year

2016. TCode S_ALR_87012284. In the next Input Screen, type the Company Code, Business Areas and Year.

Screenshot 4.30: Comparison of two Business Areas- Input Screen

The result will display comparison of Balance Sheets of the selected Business areas.

4.6 General Ledger

The General Ledger is the core component of SAP, which records all the transactions pertaining to the activities in the various modules of SAP.
SAP general ledger which is part of FICO module generates financial statements and informational reports, manage the Company's cash flow, asset accounting, accounts payable and accounts receivable. The single database maintained by the general ledger reduces risks of data inconsistency and data duplication. It also provides transparency and better internal controls.

General ledger also allows users to **hold** or **park** incomplete documents temporarily, such as those requiring some additional details or approval by a higher authority before posting it in SAP.

4.6.1 General Ledger Analysis

G/L account analysis includes:
- Balance Analysis
- Line Item Analysis
- Evaluations

GL Codes starting with '1' is Balance Sheet item.
GL code starting with '2' is 'P&L account' item.

4.6.2 GL Account Balances

There are many methods to view the GL account balance in SAP. Some are discussed below:

(A). T/Code S_ALR_87012277 OR F.08

• Opening Balance (Carry forward Balance from previous year)

• Totals of all transactions for each posting period broken down for Debits and Credits

Report/Transaction Code	S_ALR_87012277 OR F.08
Menu Path	Financial Accounting → General Ledger →Information Systems → General Ledger→Accounts Balances

Enter Selection Parameters for Filtering the Report such as Company code / GL Account as below:

Screenshot 4.31: GL Account Balance Input Screen

Press F8 (Execute) In the next screen, GL Account Balance List is generated as below:

Screenshot 4.32: GL Line Item Details

(B) T/Code: FAGLB03, FS10N, F.08

Note: *If we want to get BA-wise balances, select 'Business Area Allocation' under 'Output Control'.*

4.6.3 GL Account Totals and Balances

Report	S_ALR_87012301
Menu Path	General Ledger →Information Systems → GL Reports →Accounts Balances→ General → Totals and Balances

In the input screen, enter the Selection Criteria- Company Code/ COA / GL Accounts for filtering the Report. Press Execute icon.

Screenshot 4.33: GL Account Totals and Balance using SAP Menu

GL Account Total and Balance report is generated as below:

Screenshot 4.34: GL Account Totals and Balances

4.6.4 General Ledger Line Items

T/Code: S_ALR_87012328 OR F.51

In the input screen, enter Selection criteria like Company Code / Chart of Accounts / GL Account for Filtering.

Screenshot 4.35: GL Account List using SAP Menu- Input Screen

Press F8 (Execute) The GL Account List is generated as per the filtering selections from the previous screen. Otherwise complete list is generated for all company code and chart of accounts.

Screenshot 4.36: GL Account Totals and Balance

4.7 Accounts Payable

Accounts Payable is used to manage and record accounting data in respect of all the vendors.

All the postings that are made in the Account Payable are also simultaneously updated in the General Ledger. Accounts Payable manages Vendor Master Data, Invoice Handling, Payments, Account Analysis of Reconciliation and Reports.

Useful Reports in Accounts Payable (Access depends on the user privilege)

S_ALR_87012103	List of Vendor Line Items
S_ALR_87012083	List of Vendor Open Items for Printing
S_ALR_87012104	List of Cleared Vendor Items for Printing
S_ALR_87012082	Vendor Balances in Local Currency
S_ALR_87012084	Open Items – Vendor Due Date Forecast
S_ALR_87012079	Transaction Figures: Account Balance
S_ALR_87012078	Due Date Analysis for Open Items
S_ALR_87012086	Vendor List
S_P99_41000099	Payment List

4.7.1 Vendor Line Item

Report : S_ALR_87012103

Screenshot 4.37: Vendor Line Item Input Screen

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4.8 Accounts Receivable

The Accounts Receivable is used to manage the accounting data of all customers. All postings in Accounts Receivable are also recorded simultaneously in the General Ledger. Accounts Receivable manages Customer Master Data, Credit Management, Invoice Processing, Cash Receipts &Payments, Accounts Analysis and Reconciliation, Reports etc.

Useful Reports in Accounts Receivable (Access depends on the user privilege)

S_ALR_87012172	Customer Balances in Local Currency
S_ALR_87012197	Customer Line Items
S_ALR_87012168	Due Dates Analysis for Open Items
S_ALR_87012173	List of Customer Open Items
S_ALR_87012176	Customer Evaluation with Open Item Sorted List
S_ALR_87012177	Customer Payment History
S_ALR_87012178	Customer Open Item Analysis (Overdue Items Balance)
S_ALR_87012198	List of Customer Cleared Line Items
S_ALR_87012199	List of Down Payments open at key date

4.9 Bank Reconciliation

Bank reconciliation is the process of comparing the cash position as per bank statement and as per Company's books.

In SAP system, reconciled bank balance can be obtained for any given date at any point of time.

For each bank account maintained by the company, there will be five GLs viz. Main Account **(0)**, Incoming Clearing Account **(1)**, Outgoing Clearing Account **(2)**, Unidentified Account **(3)** & Auto Sweep Account **(4)**.

The PMS collections and bank statements are uploaded by the Accounts wing *(Ref BSNL CO Lr No BSNL/ERP/FICO/15-16 dated 11/02/2016)*. Bank Reconciliation is carried out through **T/Code ZBANK_BRS.** All open items will be displayed in the statement.

Screenshot 4.38: Bank Reconciliation Input Screen

Note: *Access not provided to audit*

The print preview of B Bank Reconciliation Statement is displayed as below:

Screenshot 4.38 Bank Reconciliation

Using transaction code **FAGLL03**, the open line items of either receipt or payment GL code as at the closing of date of accounts may be extracted from the system.   The open items will provide the outstanding/reconciled balances as at the end of financial year

4.10 Checking of Clearing GL Codes

The following GL Codes are for clearing purpose and at the end of the financial year, the balances in these GL codes are to be zero. Balances in these accounts indicate misclassification or non-adjustment/clearance..

GL Account	Description
1310106	BSNL — Plants
1310850	TDS Offsetting/Clearing Account
1310851	TCS Payable Offsetting Account
1311000	Asset Acquisition Clrg Account
1311204	HR Third Party Clearing Account
1390101	Inter Company Payables
1390102	Inter Plant Reconciliation
1390103	Bank Clearing Account
1390401	Inter Circle Remittance Clearing A/C
1390402	Intra Circle Remittance Clearing A/C
2340001	Inventory Offset Clearing Account
2340002	Surplus/Deficit Due To Rate Variation
2420102	TDS Certificate Recoverable From Customers/Others
2690101	Temporary Advance/ Imprest Clearing Account.
2690102	BSNL — Plants
2690103	Inter Company Receivable
2690104	AQN From Affiliated Company Code
2690105	Tender Fees Clearing Account
2690106	Stock Transfer Clearing Account
5024001	External Project Clearing A/C
5090101	PS Clearing Account
5090102	Stock Transfer - SAP To Non SAP Location
5090103	Zero Balance A/C Sale Of Assets
5090105	Transfer Of Project Costs To CWIP
2510000098	Advance Collection Clearing
2510000099	Credit Card Clearing Account

4.11   Special GL Transactions and Codes

Special G/L transactions are various types of Accounts Receivable (AR) and Accounts Payable (AP) transactions that do not follow normal document posting logic and account determinations.

These are posted using a special G/L indicator with a corresponding posting key. Each transaction will have an indicator which represents its type and properties that designate its posting method.

Special GL Code against a transaction in the vendor report indicates the nature of transaction. See the column next to Doc date in the screenshot below:

Special GL Codes

	St	Assignment	DocumentNo	Type	Pstng Date	Doc. Date	S	DD	Amt in loc.cur.	LCurr	Text		Vendor Cod	Vendor Name
	🔴	1131201	400395556	UE	27.09.2013	27.09.2013	3		48.00	INR	MSEDCL			
	🔴	1131201	400395562	UE	27.09.2013	27.09.2013	3		112.00	INR	MSEDCL			
	🔴	1131201	400395611	UE	27.09.2013	27.09.2013	3		240.00	INR	MSEDCL			
	🔴	1131201	400395615	UE	27.09.2013	27.09.2013	3		270.00	INR	MSEDCL			

Screenshot 4.25: Special GL Code

Some Common Special GL Codes
G : EMD REC
H : Security deposit by vendor
9 : EMD > 3yrs
8 : SD > 3 yrs
7 : Vendor > 3yrs
3   k: Security deposit with vendor
4: Advances to vendor – Capital

4.12 Checking Exceptional Items

Exceptional item means any transaction other than the normal transaction.
Exceptional items are to be further probed in audit to ascertain its correctness and impact.

Eg Debit in Sales A/c. For sales, customer is debited and Sales A/c credited. We expect only credit in the Sales A/c. Hence any debit indicates reversal of normal entry.
Debit and credit are indicated by posting keys 40 and 50 respectively under the column 'PK'. In the screenshot below, the first 4 entries are debit entries for reversal of sales already accounted for. This can also happen due to selection of wrong posting key while recording the transaction.

Posting Key can be used to identify exceptional items in SAP.

Screenshot 4.39: Exceptional Items

4.13 Open Items and Cleared Items

Open Items are transactions pending clearance and Cleared Items are transactions which have been completed.

Open Items are indicated by 🔴 **and Cleared Items by** 🟩

Example

When an invoice is posted against a vendor account in SAP, an open item is created in Accounts Payable. When an invoice is issued to a customer, an open item is created in Accounts Receivable. The open item is cleared in Account Payable when payment is made to the vendor. In Accounts payable, an open item is cleared when payment is received from the customer.

4.13.1 To view the Open Items as on date

T/Code FBL1N (Vendor), FBL3N (GL), FBL5N (Customer)
(Reports: S_ALR_87012083- List of vendor open items, S_ALR_87012173- List of Customer open items)
Using T/Code: FBL1N - Give the Company Code and select Open Items. The screen will show the current date as the default date. Click the Execute icon or F8.

Screenshot 4.40:View Open Items- Input Screen

The list of open items is displayed as below:

Screenshot 4.41: Open Items

4.13.2 Audit Analysis of Open Items

A transaction initiated in SAP should be completed within a reasonable time. Items remaining open for unreasonably longer period need examination. The following audit checks are suggested on open items.

i) Age-wise analysis of open items will give year-wise/month-wise details of open items. Audit can probe the reasons for keeping the items open. Some of the reasons can be:

- Want of funds
- Want of bank account details to transfer the money
- Want of further documents/details
- Want of approval by higher ups
- Payment cleared on another document
- Migration-related issues

ii) If there was no sufficient justification for not clearing the items, examine whether non-clearance has resulted in any loss/disadvantage to the Company (Eg. Interest/penalty for default/delayed remittance)

iii) A category-wise analysis of open items will help audit in identifying the types of transactions in which pendency is more. Audit can probe the reasons thereof.

iv) Audit can select a few items based on amount involved, category, pendency for detailed examination

4.14 Parked Items

Parked items are transactions kept pending for posting in SAP.

Parking is necessitated on account of:

-want of details/clarifications

-Non-availability of fund

-One Time Vendor payments for approval by higher authority

Parked Items are indicated by ⚠

4.14.1 To View the Parked Documents

T/Code FBL1N (Vendor), FBL3N (GL), FBL5N (Customer)

In the next screen, input the Company Code (1022) and select Open Items and Parked Items. The screen will show the current date as the default date. Click the Execute icon or F8. Parked docs are displayed as below.

The Yellow upward triangle symbol in the first column indicates a parked document as below:

Screenshot 4.42: Parked Items

4.14.2 Analysis of Parked items

- Age-wise analysis of parked items and examining the justification for reasons for parking. The reason for parking can be want of details for processing the transaction or requirement of approval by higher authority (Eg One Time Vendor Payments).
- Category-wise analysis of parked items
- If parking was unjustified, whether it has resulted in any loss/disadvantage to the Company

4.15 Financial Statements: Changes Made During a Period

T/Code: FB03

We can identify the transactions made during a given period by calling the documents or the GL Account.

This will help us to identify changes made between each phases under 3-Phase Audit. For example, to view the vendor payments made during 1/5/2017 and 1/7/2017, select the Company Code, Fiscal Year, Posting dates, Document Type (KZ) and execute.

Screenshot 4.43: Changes made during a specific period

The transactions during the period are displayed as below:

Screenshot 4.44: Changes made during a specific period

To view the Document No 1500135488, click the Doc Number. The Document in Data Entry View is displayed as below:

Screenshot 45: Display Document

To view the Document Header, click the icon in the menu bar. The header is displayed as below:

Screenshot 46: Document Header

4.16 Cash Journal

Cash Journal is a sub-ledger of Bank Accounting.

It is used to manage a company's cash transactions. The system automatically calculates and displays the opening and closing balances, and the receipts and payments totals.

T/Code: FBCJ3

Type from and to dates.

Screenshot 47: Cash Journal

Below is the cash journal for the year 2015-16:

Screenshot 48: Cash Journal

It gives the OB, total cash receipts, checque receipts and cash payments, closing balance during the year with details of individual transactions such as GL accnt, vendor, customer, receipient, profit cente, business area, posting date, doc date, Reference etc.

Document Status: **Green** Square in the Document Status column indicates that entry has been made in GL and cash Journal. **Yellow** triangle indicates that 'entry saved in cash Journal' and **red** indicates that 'Entry Reversed'.

For line item details, click the line item

To view the posted document, click the icon below the screen.

The result obtained through the **T/Code FBCJ3** should tally with the balance under the respective GL Code. But there can be differences

(i) The entry is saved but not posted in FBCJ, balance in FBCJ will be updated but the GL will not be updated

(ii) GL 2510000001 is posted directly without going through FBCJ, balance in GL will be updated, but will not be updated in FBCJ

(iii) In FBCJ, the posting is made against a different BA. The balance in FBCJ will be updated but GL posting will be against the incorrect BA.

PART 5: ASSET ACCOUNTING

5.1   Asset Accounting

Asset Accounting carries out all accounting activities connected with the life cycle of an asset starting from acquisition, upkeep, depreciation and final disposal or retirement. It also manages leased assets and Assets Under Construction (AUC). The asset accounting in SAP is managed by the Financial Accounting Asset Accounting (FI-AA) component. It serves as a subsidiary ledger to the FI GL, providing detailed information on transactions involving fixed assets. It is integrated directly with other FI components such as Materials Management (MM) and Plant Maintenance (PM).

5.2. Classes of Assets

The assets of BSNL are divided in to three layers:
- Main Class   : 15 Nos. Eg. Land, Building, A&P, L&W, Transmission Media
- Sub Class : 41 Nos. Eg. A&P_GSM core, A&P_CDMA core, A&P_WIMAX core, A&P_Transmission Equipment are the final assets of sub-class A&P_GSM core
- Components : 439 Nos. Eg. MSC server, Gateway router, signaling NW equipment etc.

Asset details are maintained at Component level. The maintenance of Component-wise Asset Register is in accordance with **IndAS**. Components are grouped into sub-classes and finally being grouped at Main classes. Grouping of assets at Sub-class and Main class are for reporting purpose. The Main-Class will have one-to-one relation with current GL account i.e., 15 account codes are used for 15 Main-Class.

The 21 Classes of Assets are given below. The Asset Class code will be useful when we need details in r/o a particular class of asset.

Class	Asset Class Name	Class	Asset Class Name
3900	AUC – Buildings	9909	Off mach & equipment
4000	AUC – Machinery	9910	Electrical Fittings & Appliances
4100	AUC - General	9912	Furniture & Fixtures
9901	Land - Freehold	9913	Computers
9902	Buildings	9914	Subscribers Installation
9903	Apparatus & Plants	9915	Intangible assets
9904	Motor Vehicle	9916	Land - Leasehold
9905	Cables	9917	Decommissioned Asset
9906	Lines & Wires	9918	Project Ready-CWIP Tfrd
9907	Installation Test Equip	9919	Computer (Server)
9908	Masts & Aerials		

5.3 Depreciation

Depreciation is the decrease in the monetary value of an asset over time due to use, wear and tear or obsolescence.

Depreciation is automatically calculated in the system by the Depreciation Keys attached in the asset master. Depreciation can also be manually posted using a special posting transaction (Planning Manual Depreciation).

5.3.1 Depreciation Areas

There are 4 areas of depreciation in SAP for BSNL requirement. The depreciation areas are linked with **depreciation keys**. The depreciation areas in BSNL are:

Sl No	Depreciation Areas	Remarks
1	Book Depreciation	As per Companies Act 2013
2	Book Depreciation	As per Companies Act 1956
3	Tax Depreciation	As per Income Tax Act
4	IndAS Depreciation	As per IndAS

How to view the depreciation areas is discussed under 5.4.2.

5.3.2 Depreciation Keys

The depreciation key contains the value settings which are necessary for determining depreciation amounts. It represents a combination of calculation rules, which are used for the automatically calculated depreciation types. The depreciation keys in BSNL are:

Dep Key	Description	Dep Key	Description
0	No depreciation and no interest	Z002	BSNL - 45.08% Declining balance
DG30	Declining balance 3 x	Z003	BSNL - 15.33% Declining balance
GD50	Buildings decl.bal. 5.0 / 2.5 / 1.25 %	Z004	BSNL - 5% Declining balance
GWG	LVA 100 % Complete depreciation	Z005	BSNL - 25.89% Declining balance
IN1	Tax Depreciation - 5% - India	Z006	BSNL - 18.10% Declining balance
IN2	Tax Depreciation - 10% - India	Z007	BSNL - 40% Declining balance
IN3	Tax Depreciation - 15% - India	Z008	BSNL - Leasing Dep key
IN4	Tax Depreciation - 20% - India	Z009	BSNL - Str.-line from remaining life to book value zero
IN5	Tax Depreciation - 25% - India	Z010	Tax Depreciation - 5% - BSNL
IN6	Tax Depreciation - 40% - India	Z011	Tax Depreciation - 10% - BSNL
IN7	Tax Depreciation - 50% - India	Z012	Tax Depreciation - 15% - BSNL
IN8	Tax Depreciation - 60% - India	Z013	Tax Depreciation - 20% - BSNL
IN9	Tax Depreciation - 100% - India	Z014	Tax Depreciation - 25% - BSNL
LEAS	Leasing	Z015	Tax Depreciation - 40% - BSNL
LINA	Str.-line via acq.value below zero	Z016	Tax Depreciation - 50% - BSNL

	with interest			
LINR	Str.-line from rem.life to book value zero	**Z017**	Tax Depreciation - 60% - BSNL
S7DB	Spec.dep.AuC (60%)	**Z018**	Tax Depreciation - 100% - BSNL
SFE4	Spec.dep. mobile goods (40%)	**Z019**	LVA 100 % Complete depreciation
Z000	No depreciation and no interest	**Z123**	Depreciation Key effective from 01.04.2014
Z001	BSNL - 13.91% Declining balance	**Z999**	No depreciation and no interest with Depreciation to day

5.4 Display Asset Register

Asset Register contains details of all tangible and intangible assets of the Company.

Transaction Code: AR01 or AR02.

Eg: To view the Asset Register of BA 2204 under Company Code 1022 on the Reporting Date 31/03/2016. Enter the criteria as shown in the window and execute.

Screenshot 5.1 View Asset Register- Input Screen

The Asset Register of Business Area 2204 is displayed as below:

Screenshot 5.2 Asset Register

5.4.1 Details of Individual Assets

Click the line item of asset for details like, Acquisition, Additions, Deletion, CY Depreciation, Acc Depreciation, Depreciation at Co Act Rate, Depreciation IT Rate, in respect of any particular asset. The details will be displayed as below:
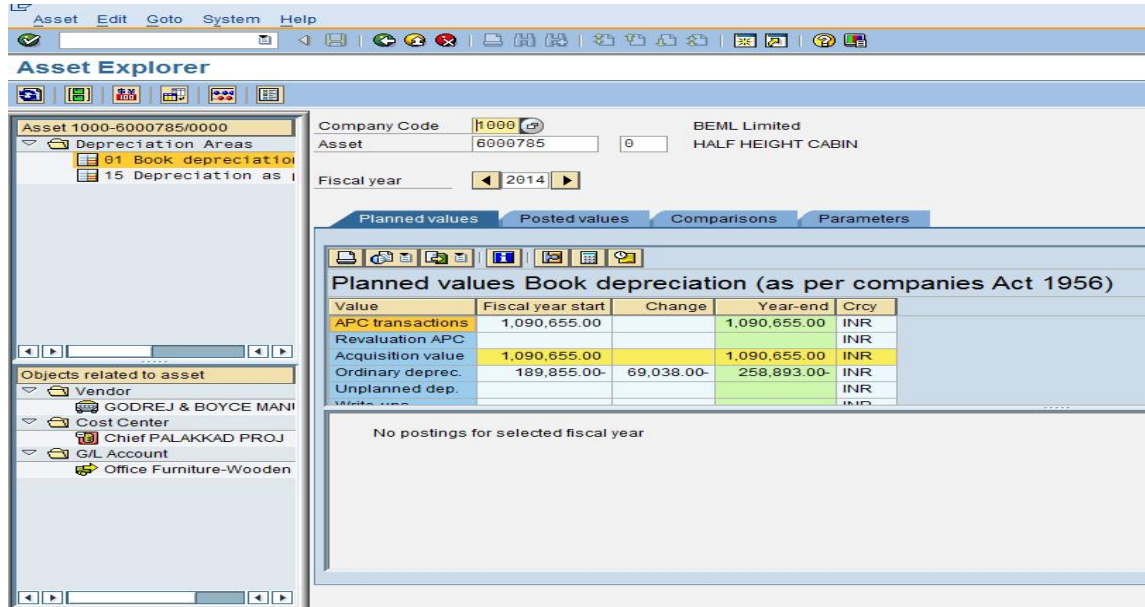
Screenshot 5.3 Details of Individual Assets

5.4.2 Class-wise details of Assets

(Ref. Para 5.2 for details of Classes of assets)

Transaction Code	AR01
Menu Path	Logistics→ Accounting →Financial Accounting → Fixed Assets →Asset Values

Using SAP Menu:
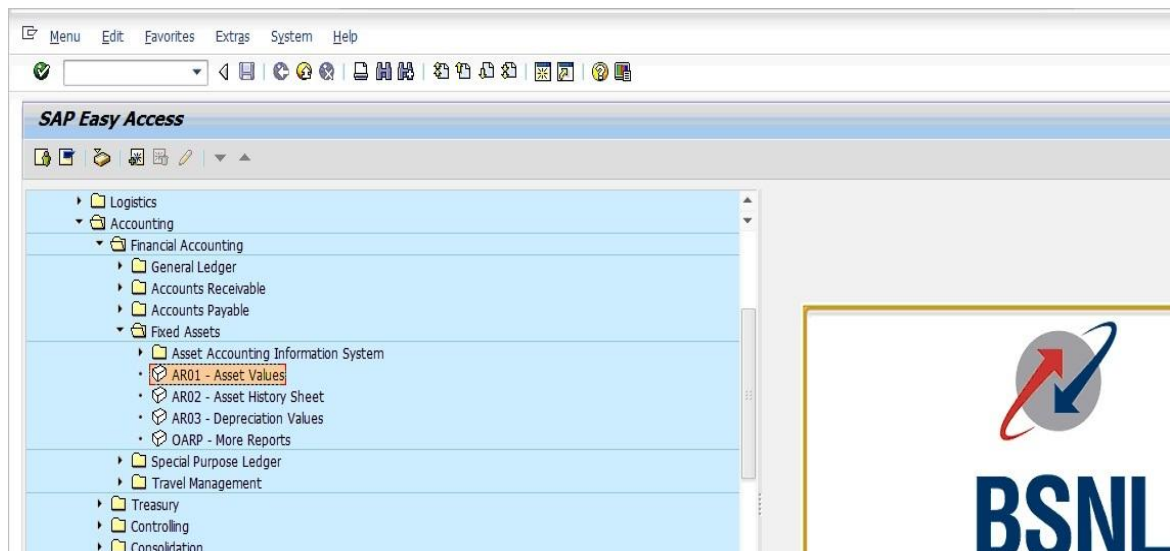
Screenshot 5.4 View Class-wise Asset Details using SAP Menu

For Eg. If we want to view details of Assets Under Construction (AUC) as on 31/3/2015, enter the Company Code and Asset Class (4100) and Report Date as 31/3/2015, in the next window as shown below:

Screenshot 5.5: To view class-wise Asset Details-Input Screen

The details of AUC (Assets Under Construction) as on 31/3/2015 are displayed in the next screen and shown below:

Screenshot 5.6: Class-wise Asset Details

Note: If we compare the AUC data for consecutive 2-3 years we can identify works with no financial progress which indicate that the work is remaining idle.

5.4.3 Master Data in r/o a Particular Asset

Transaction Code	AS03
Menu Path	Accounting →Financial Accounting → Fixed Assets →Display →Assets

Eg. To view the Asset Master Data of Asset ID 99030021488. The Asset ID is available in the Asset Register. Enter the Asset ID and Company Code. No need to change the Subscriber default value '0' in the following window. Press 'Enter' or the Tick icon below the window:

Screenshot 5.7:Display Asset- Input Screen

The Asset Master Data in r/o Asset ID 990300215488 are displayed as below:

Screenshot 5.8: Asset Master Data

Note:

Click **'Time Dependant'** for getting the Business Area, Cost Center, Plant, Location, WBS Element etc. Click **'Allocations'** for Service/Est, Sub Class, Region, Components, G/L Code etc as shown below:

Details of 'Allocations' are displayed as in the screen below:

Screenshot 5.9: Asset Master Data- Allocations

Click 'Depreciation Area' to get the Depreciation Keys and Useful Life.

5.4.4 Changes in Asset Master Data

On screen "Display Asset: Initial Screen" Go to: **Environment →** Change Documents→On Assets.

Screenshot 5. 10: To view changes in Asset Master

The result will be displayed as below:

Screenshot 5.11: Changes in Asset Master

5.4.5 Asset Explorer

Asset Explorer function shows all the values of a fixed asset, including APC (Acquisition and Production Cost) values and depreciation, in various forms and summarization levels.
T/Code: AW01N
In the input screen, give the Company Code and Asset No. Enter F8. The Asset Explorer screen will display the Acquisition value, Ordinary depreciation, Net BV etc. By default, the window will display the result of previous query. Change the Asset Id and execute.

Screenshot 5.12: Asset Explorer

5.4.6 View Asset Value Report

Asset Value Report will display details like Asset Class, Asset Number, Date of acquisition, Asset Description, Quantity, Life etc.

T/Code: zfiassetvalue

Asset Value Report of Material Group 9903 in r/o Alappuzha SSA

Screenshot 5.13: Asset Value Report-Input Screen

Asset Value Report will be displayed as below:

Screenshot 5.14: Asset Value Report

5.4.7 Asset Line Item Details

If we want to know the details of asset id No 991703267 (4K L OCB Tandem Switch) in the following screen, click on it under the column 'Asset'. It will display details of Individual Assets such as Acquisition, Additions, Deletion, Current Year Depreciation, Acc Depreciation, Depreciation at Co Act Rate, Depreciation IT Rate etc.

Screenshot 5.15: Asset History Sheet

5.5 General Check on Depreciation

Depreciation is worked out automatically by SAP using COD (Chart of Depreciation). **COD** is a chart containing different areas of depreciations like Book depreciation (as per Companies Act), Tax depreciation (as per Income Tax Rules), consolidated depreciation, etc. are used in order to manage various legal requirements for the depreciation and valuation of assets. These charts of depreciation are usually country-specific and are defined independently of the other organizational units. (Ref Para 5.3 for details on Depreciation)

To Call Up Depreciation List
Transaction Code: AR03
Another dialogue window appears. There are following 3 options for depreciation.
- Book Depreciation (Depreciation as per Companies Act 2013)
- Depreciation as per Income Tax Act 1961
- Depreciation as per IFRS (International Financial Reporting Standards)

Click 'Book Depreciation'. Click the tick mark below the pop up box.
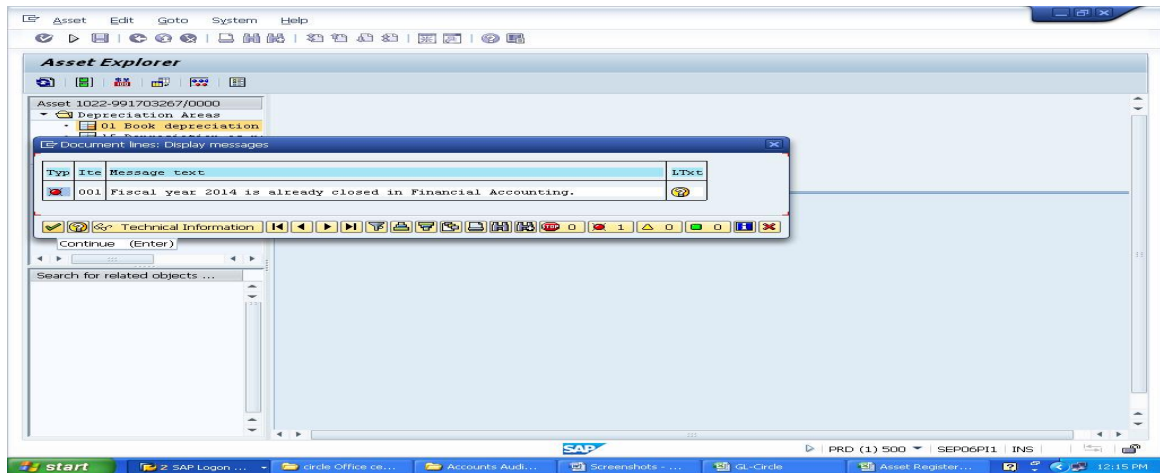
Screenshot 5.16: View Depreciation- Input Screen

The details of depreciation in r/o Asset Id 991703267 are displayed as below.

There are 4 options here:

- Planned Value
- Posted Value
- Comparison
- Parameters

Click on each to get the corresponding value.

Eg. On clicking 'Planned Value', the result is displayed as below:
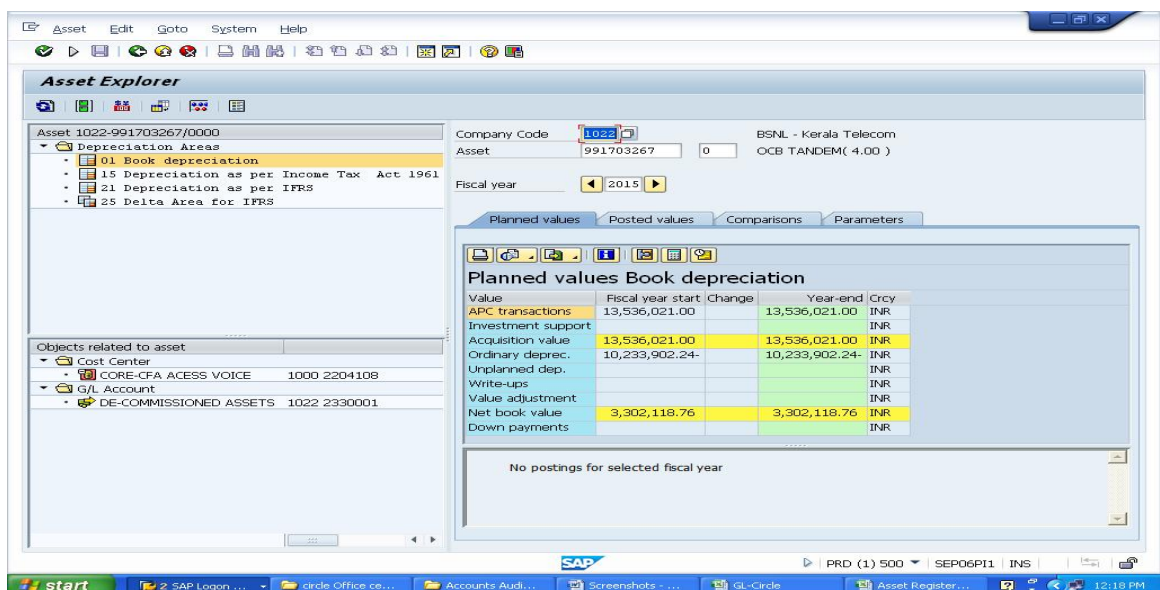
Screenshot 5.17: Planned Depreciation

5.5.1 Recalculation of Depreciation

We can also find out the depreciation on any date other than the current date using the following method:

Click the icon ![icon] as shown in the screenshot below:
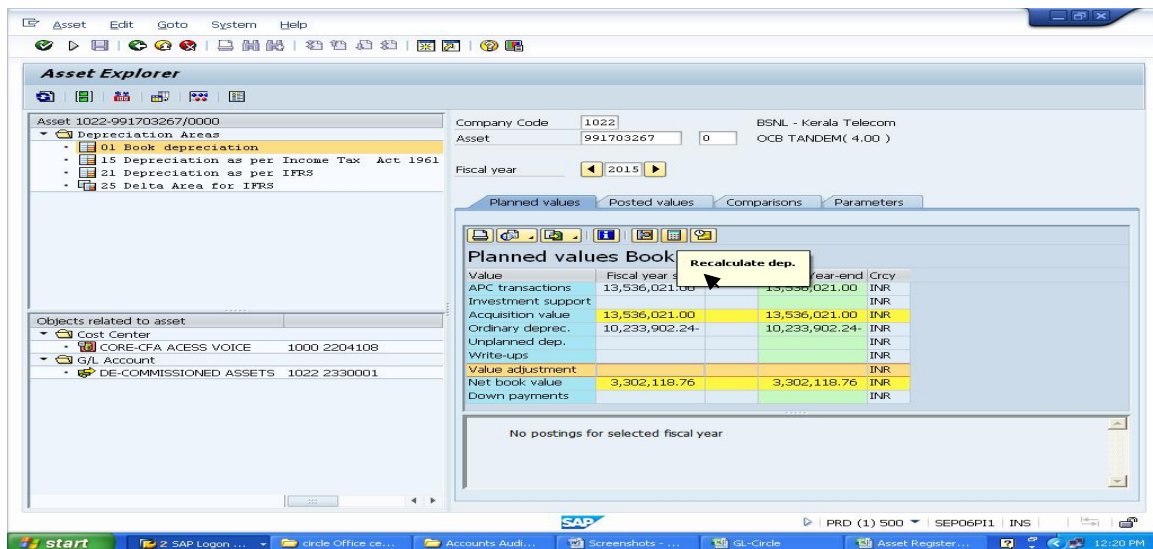
Screenshot 5.18: Recalculation of Depreciation

5.5.2 Net Book Value on any Date

Net BV on any date can be calculated. Click the icon for 'calculate net book value for' as shown below:
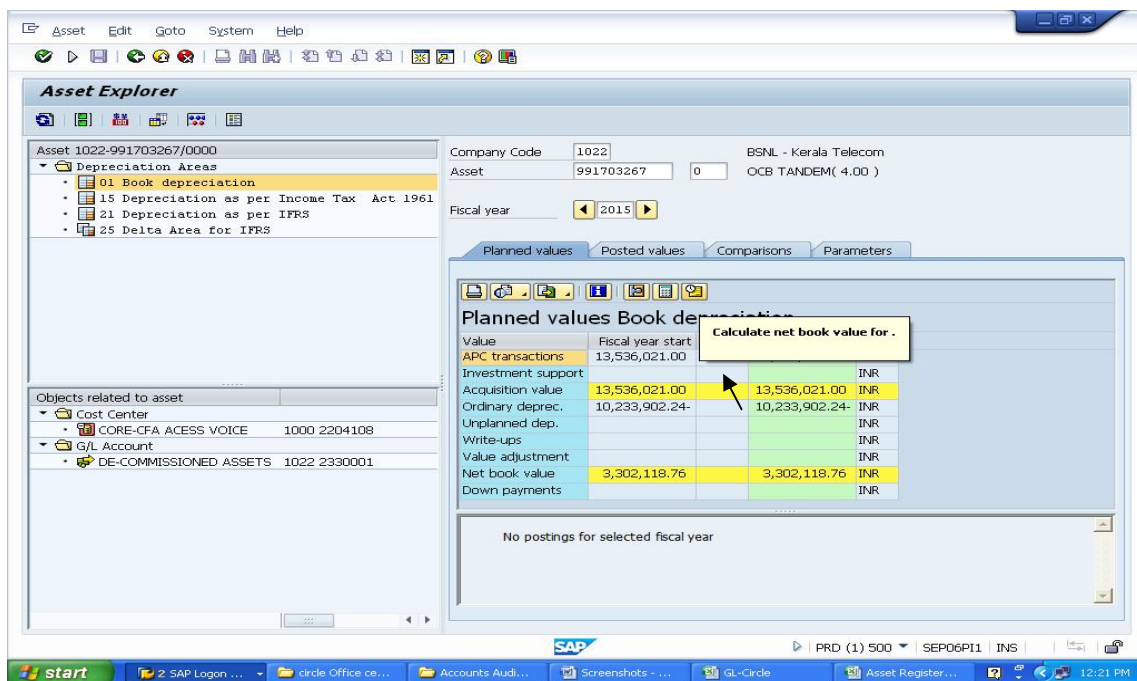
Screenshot 5.19: Recalculation of Net BV

If w want to calculate net BV as on 11/9/2015, enter the date in the 'Asset Value Date' box and click 'Calculate' in the pop up box as shown in the screenshot below:
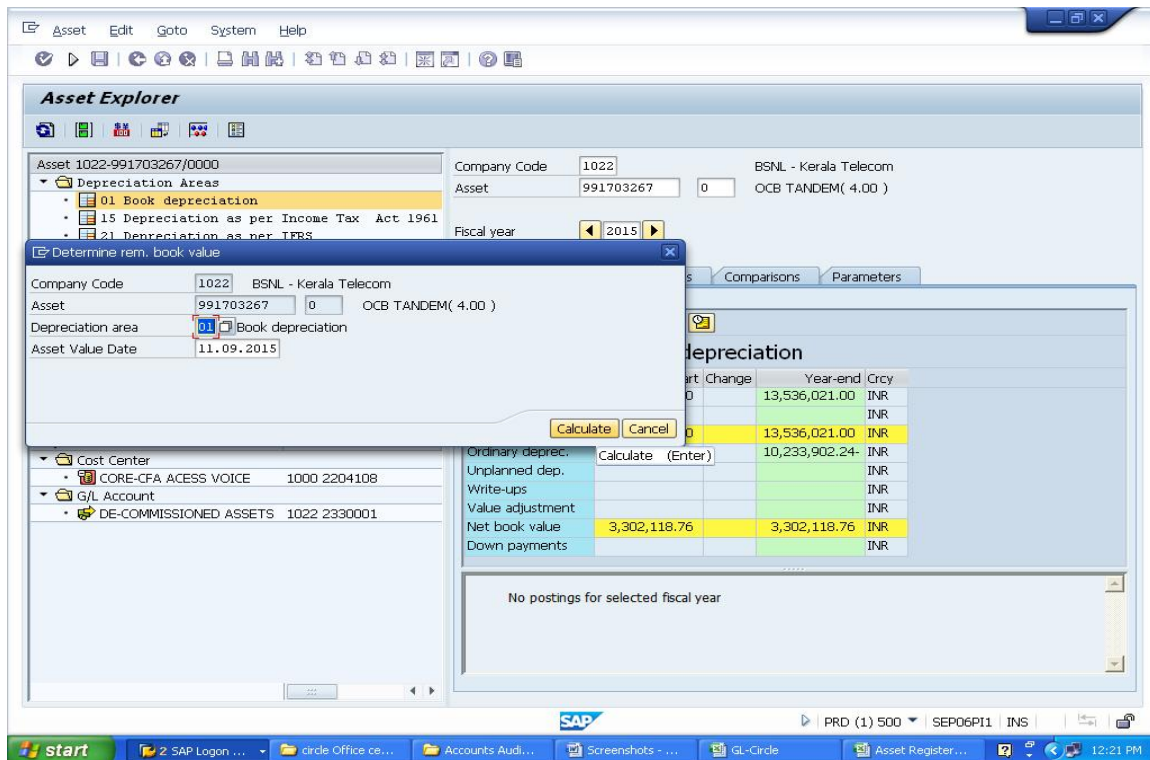
Screenshot 5.20: Book Value on any Date

Click 'Planned Depreciation' for depreciation planned for the year, 'Posted Values' for depereciatin posted for the year and 'Comparisons' for residual value, WDV, depreciation during the year upto useful life.

Eg: Result for 'Posted value'
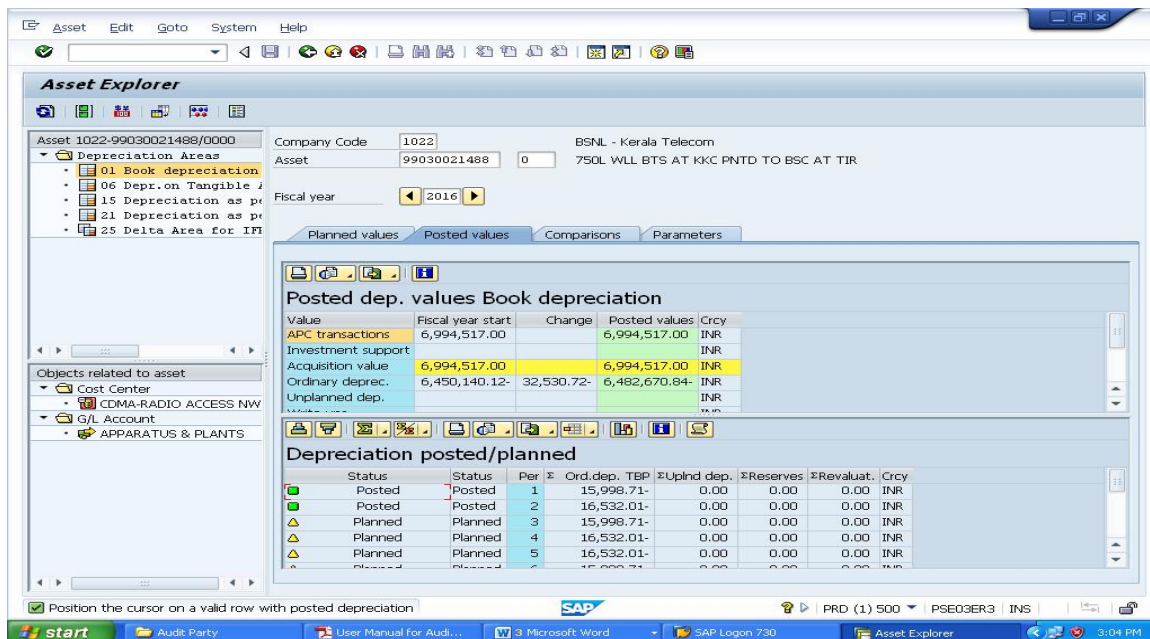
Screenshot 5.21: Book Value on any Date

5.6 Asset History

To know the Asset Balance, Asset History Sheet, Asset Transactions, Asset Acquisitions, asset Retirements, Particulars, Inter Company Asset Transfers etc, follow the screenshot below:
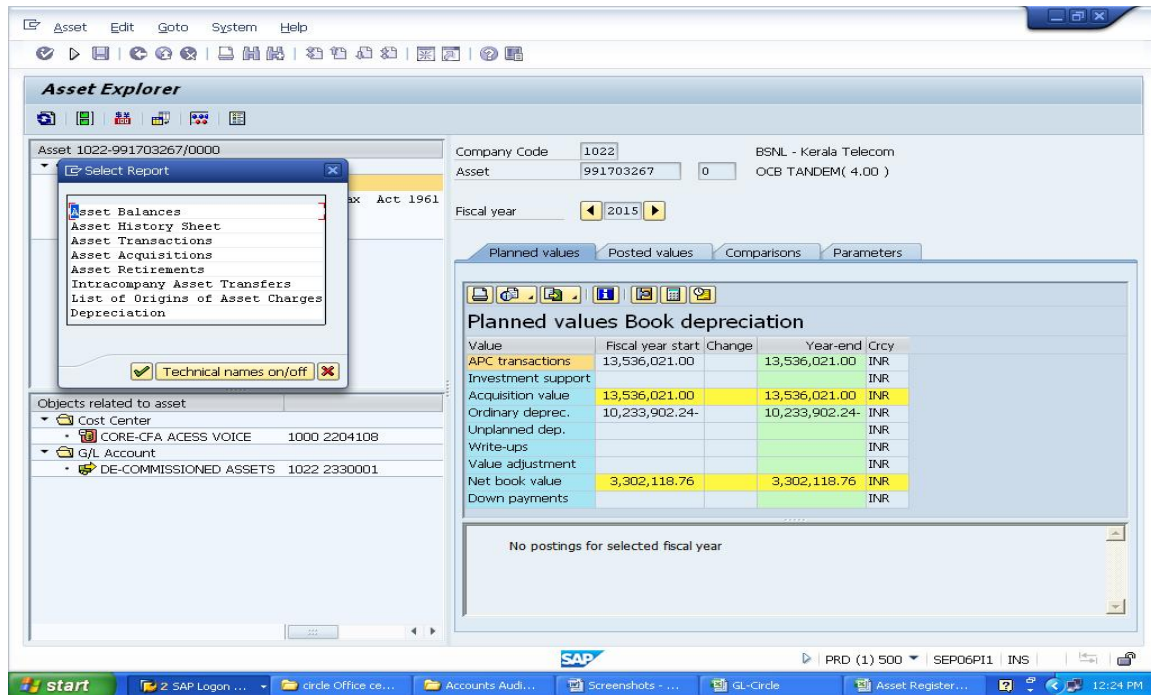
Screenshot 5.22: View Asset Balance

Eg: Asset Balance
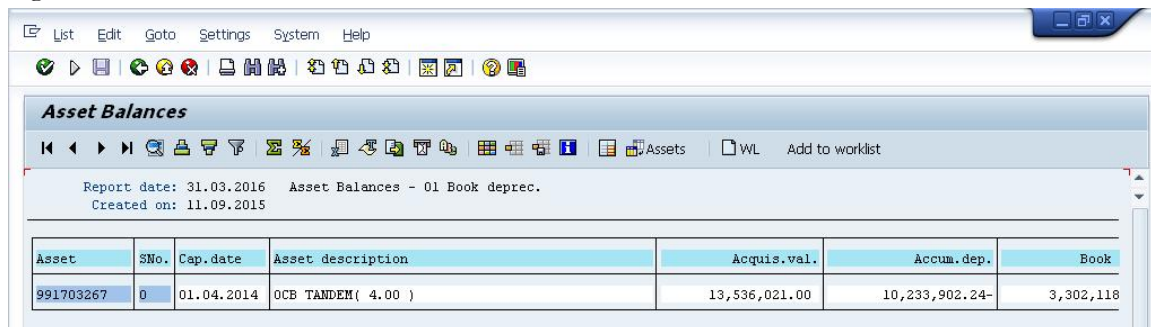
Screenshot 5.23: Asset Balance Display

5.7 Assets Added During Current Year

T/Code: AR01 or AR02

The additions in assets during a specific period (say, financial year) can be extracted from SAP using the above Tcodes. Verify the list with Management Certificate issued during the period. Selection can be made from the list based on value, nature of asset etc. for detailed examination. For individual assets, use assets explorer in the SAP – AW01 or   AW01N for verification of assets history, valuation details of assets, depreciation simulation.

To view assets added during 2017-18, specify the Company Code, Business Area, Reporting Date and Capitalization date as 01.04.2017 to 31.03.2018 with default value in Depreciation are as 01 and Sort Variant as 0001 as in the screen below:

Screenshot 5.24 To view assets added during 1/3/2017 to 1/4/2018

The result (value column sorted in the descending order) is displayed as in the window below:

Screenshot 5.25: List of assets added during 1/3/2017 to 1/4/2018

Note: We can also get the details from the TB. Drill down GL code 20191000

To view the Asset details for Asset No 99030074455, click the line item.
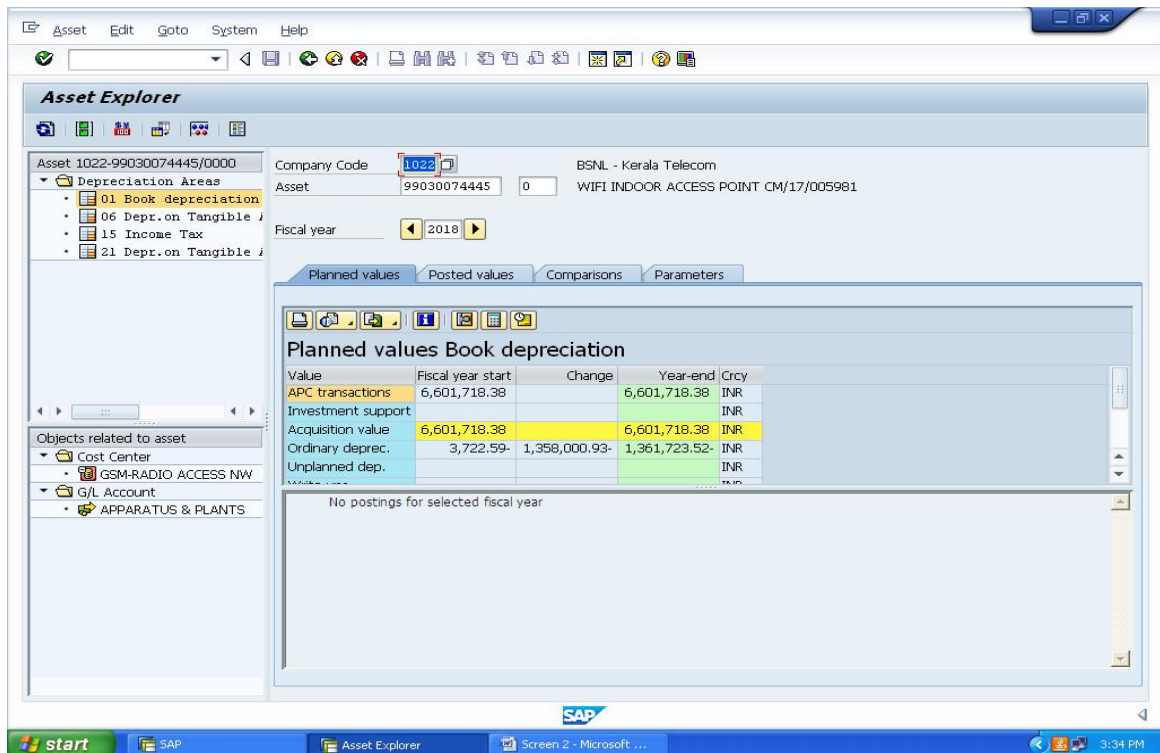
Screenshot 5.26: Asset Explorer

To display asset master data click the [icon] icon on the top
Asset Master Data is displayed as below:
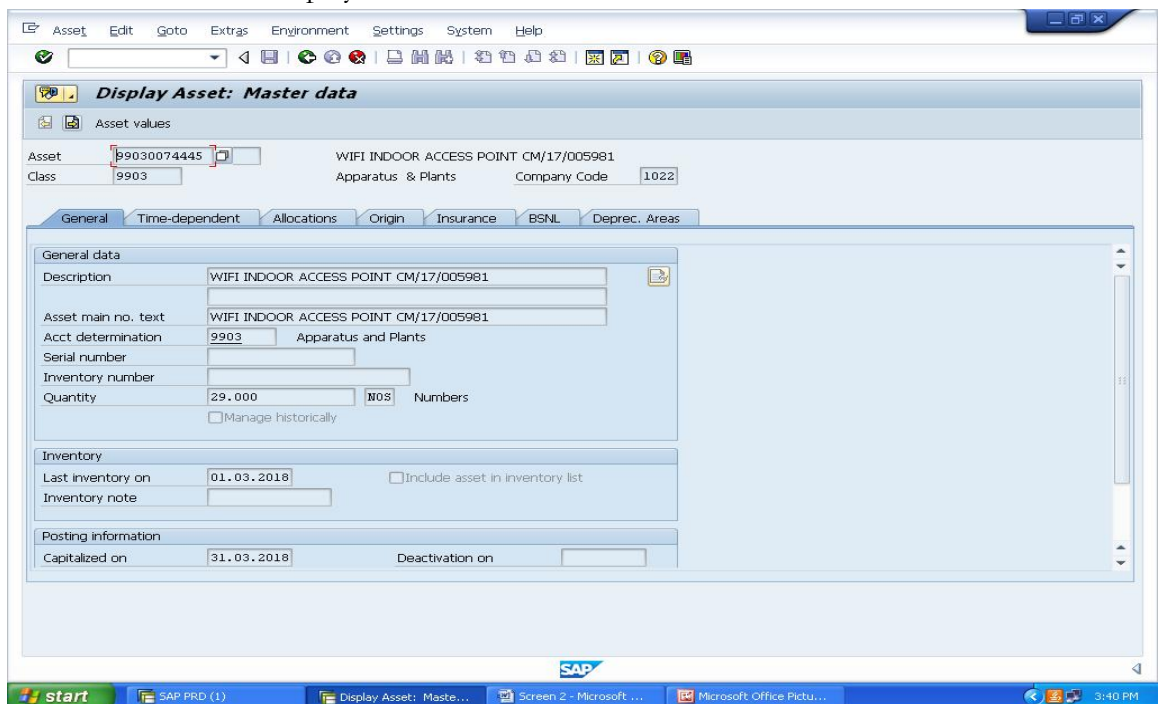
Screenshot 5.27: Asset Master Data

5.8 Asset Under Construction (AUC)

AUC are those assets which are not fully completed and in progress.
T/Code: AR01

The 'Work in Progress' in legacy system is called 'Asset Under Construction' (AUC) in SAP. Asset Class Code fr AUC is 4100.

Screenshot 5.28: Asset Under Construction: Input Screen

The list of Asset Under Construction will be displayed s below:

Screenshot 5.29: List of Asset Under Construction

Note: Comparison of assets Under Construction for 2-3 years will give details of works on with no physical and financial progress.
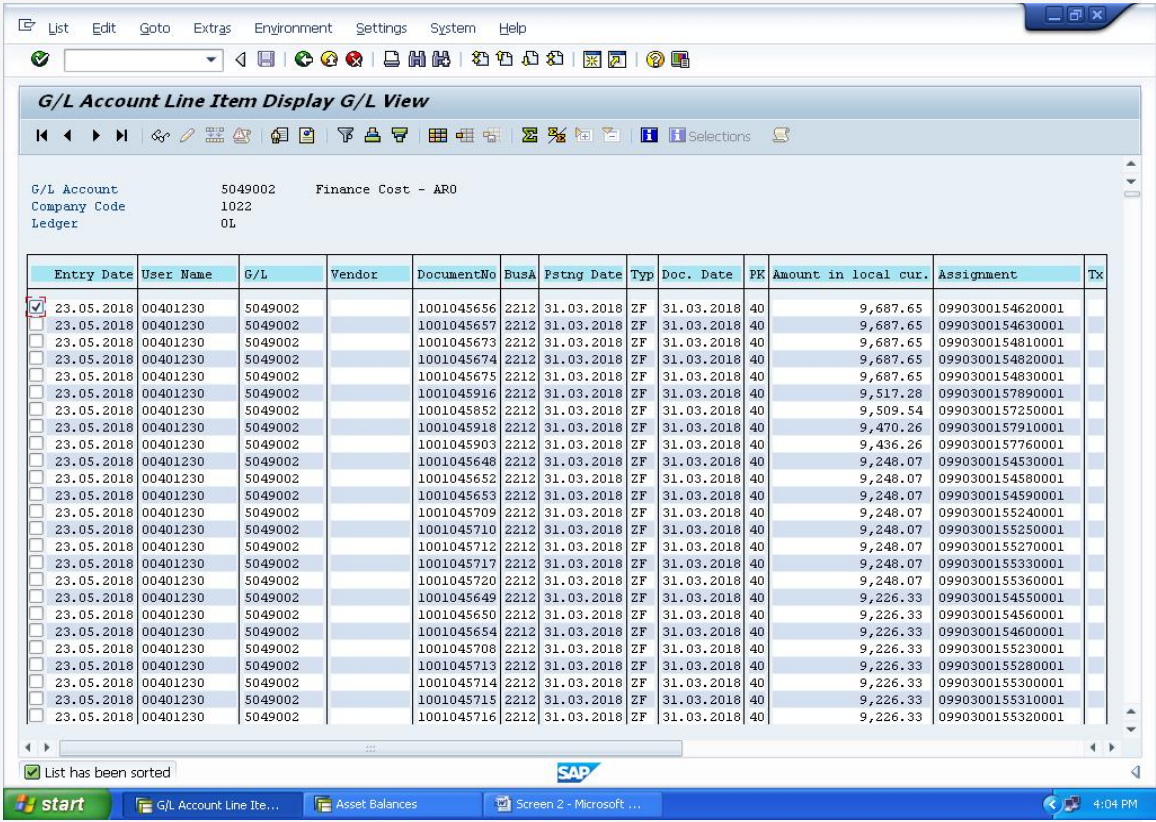
5.9 Asset Retirement Obligation (ARO)

An Asset Retirement Obligation (ARO) is a legal obligation associated with the retirement of a tangible long-lived asset, to return a site to its previous condition
Under **Ind AS 16**, the cost of an item of property, plant and equipment includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. ARO provides for such decommissioning liability at estimated cost discounted to its present value at the time when asset is capitalized. The ARO is depreciated over its expected useful life of the asset and interest recognized on corresponding provision using the discount rate that accretes the provision to the amount expected to be settled in future.

BSNL hires space for installing towers in leased land and has an obligation to restore the premises to their original condition upon vacation of such premises at the end of lease term. The company provides ARO for the restoration charges as explained above.

ARO is accounted under **GL Code 5049002.** ARO in r/o all assets drilled down from the Trial Balance is displayed as below:

Screenshot 5.30; AUC

PART 6: PROCUREMENT

6.1 Audit of Procurement

The procurements in BSNL are made in accordance with the "Manual of Procurement Policy" (http://tender.bsnl.co.in/bsnltenders/pdf/pro_policy.pdf). The company has introduced e-tendering for centralized procurements through its web portal (http://eportal.erp.bsnl.co.in/irj/portal). The 'Procure To Pay' activities in SAP include Purchase Requisition, tendering, order placing, order tracking, supply monitoring, payment processing, vendor management etc.

Auditors should be familiar with the organizational structure and process flow related to the procurement activity.

6.2 Material Management Module

The procurement functions are managed by the MM Module in SAP. MM module consists of several components and sub-components. The most prominent and widely used are Master Data, Purchasing and Inventory.

The organizational structure in MM Module is given below:
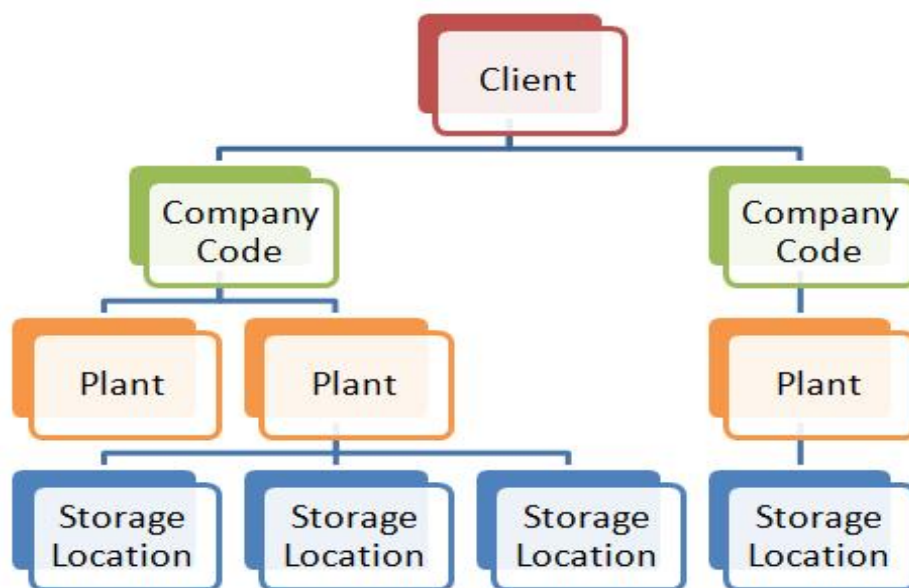
Fig: 6.1 MM Organizational Structure

6.3   The Procurement Process Flow in SAP

Purchase Requisition	Procurement is initiated with the requisition for the material
Vendor Selection	Source List
PO Processing	Based on quotations or competitive bidding and approval
Goods Receipt	Entries made in SAP on details of goods received against a PO
Invoice Processing	Invoices that do not match with PO details are automatically blocked
Payment	Payment is authorized in SAP and instruction issued for transfer of money to vendor's account.

6.4 MM Terminology

For issue of a Purchase Order through SAP requires **Company Code, Vendor Code, Cost Centre, Plant, Storage Location, Purchase Organization, Purchase Group, Account Assignment, tax code and Item Category**. Let us familiarize with the MM terminology.

■ Company Code

Company means the smallest organizational unit for which a complete set of financial statements can be drawn according to the applicable commercial laws. Eg Kerala Circle.

■ Cost Centre

An organizational unit within a controlling area that represents a defined location of cost incurrence. (O&M, Admin). All expenditure are to be booked against the relevant cost centre.

Plant

A plant is an organizational logistics unit that structures the enterprise from the perspective of procurement, material planning, production and plant maintenance. Each plant is assigned to a company code. One company code can have several plants. A plant can be assigned to only one company code. In BSNL, inventory valuation is done at plant level.

Storage Location

The storage location is an organizational unit where either inventory management on quantity basis or verification of services is carried out within a plant. A storage location is assigned to a plant. A plant may cover several storage locations. A storage location can be assigned to only one plant.

Purchase Organization

A Purchasing Organization is an organization level that negotiates conditions of purchase with vendors for one or more plants. BSNL has both centralized and decentralized purchasing organization.

Purchase Group

A Purchase Group is the key for a buyer or group of buyers responsible for certain category of procurement activities. Purchase Groups will be defined at a combination of departments (Telecom, Civil, Electrical, Marketing, Administration and Finance) and locations (Corporate, Factories, Circles, SSA, Projects, Telecom Regions and Training Centers)

Material Master

Material master is used in all material procurement processes. The creation of new material codes is handled by the Master Data Management (MDM) Cell. When a Material Creation Request is received by the MDM Cell, it makes a duplicate check and, if valid, creates the material code in the System.

Material Group and Material Code

In SAP, materials are categorized in to groups and such material groups are assigned with Material Group Code. Individual material items are also assigned with Material Code. More than **21000** Material Codes are in use in BSNL.

Vendor Master

Vendor Master is the centralized database of all the vendors of the Company. Vendors include employees, suppliers, contractors and service providers. Complete details of a vendor like name, location, address, status, registration particulars, bank account details etc are available in the Vendor Master. Each vendor is assigned a unique **Vendor Code.**

■ **Vendor Code**

A unique code assigned to a particular supplier.

■ **One Time Vendor**

One-time vendors are vendors with whom transactions are made only once or very rarely. No master data is created in Vendor Master for one time vendors. The details of the vendor are entered only at the time of entering the invoice.

■ **Service Master**

Service Masters are used to standardize externally procured services. At present Civil, Electrical service master are available in PRD/QAS system. Let us discuss how we can access this information in SAP.

■ **MIGO**

Movement in Goods Out (Goods Received) is the transaction code for posting Goods Receipt by the consignee.

■ **MIRO**

Movement in Receipts Out (Invoice Received) is the transaction code for posing invoice details by the AO CTSD/other authorized officers

■ **GR/IR Account**

Goods Received/Invoice Received Account is an intermediary clearing account for goods and invoices in transit. It represents (i) goods received but invoice not received and (ii) invoice received but goods not received.

6.5 Fraud Risks in Procurement

The common risk areas in procurement are:
- Duplicate payments
- Over-payments
- Violation of Payment terms
- Unauthorized or fraudulent transactions
- Missed discount opportunities
- Payment for damaged or defective goods

The mechanisms to mitigate the above risks are the Process Controls which include:

Sl. No	Controls	Description	Examples
1	**Configurable Controls**	Designed to maintain the integrity of the Master Data	• Configuration of Vendor Master mandatory fields • Duel authorization for sensitive fields

			• Duplicate vendor checks- warning message and reporting
2	**Manual Controls**	Includes approvals by authorized individuals based on the segregation of duties	• Decision making authority • Financial and administrative approvals • Segregation of Duties • Financial Powers etc
3	**General IT Controls**	Includes computing controls and IT notification process to guard against unauthorized changes in SAP system	• Input Controls • Process Controls • Output Controls
4	**Process Controls**	Includes system process flow, authorization levels	• 2 or 3 way verification or matching of Invoice in SAP like PO-based invoice verification and Goods/Service Receipt based invoice verification.
5	**Detective Reports**	Includes standard detective reports and customized reports	• Various reports in MM Module
6	**Security Controls**	Includes physical and logical access controls	• Physical access to the system • Logical access- Username and passwords • Privileges to various functional areas in SAP based on segregation of duties
7	**Policies & Procedures**	Includes documented procurement policies and procedures which are to be mapped in to the system	• Procurement Policy document • Circulars, Guidelines and instructions on procurement

6.5.1 Red Flags on Procurement Frauds

A red flag is an indicator that something may be wrong, not necessarily proof. Some of the red flags on procurement frauds in SAP are given below:

Sl.No	Red Flag	Fraud Risk
1	Incomplete/incorrect fields in Vendor Master	Fake Vendor, Shell Company Scheme, Phantom Bid, Ghost Vendor
2	Abbreviated Vendor Names	Duplicate Vendor, Bid Rigging, Shell Company Scheme, Fictitious vendor
3	In active vendors in system	Fictitious vendor
4	One time vendor active in system	Fictitious vendor
5	Sharing of the same address or phone number, TIN or other key data elements	Duplicate Vendor, Carter
6	Multiple "remit to" addresses	Shell Company Scheme, Fake vendor, Flipping

7	Payments to contractors not on approved vendor list	Shell Company Scheme, Fake vendor
8	Vendors with no PAN/TAN	Fictitious vendor
9	Vendors and employees having similar information	Conflict of Interest
10	Poor, illegible, or missing documentation supporting a vendor payment	Fake Vendor
11	Change in key field of vendor Master	
12	Change in vendor master critical details followed by a change back to original after a short time and payment made in the interim period	Flipping
13	Large billings broken into smaller invoices that falls just below a threshold level.	Fake Vendor
14	Same vendor, amount and date but different invoice number	Duplicate payments
15	Two Vendors with same invoice number, date and amount	Duplicate payments, duplicate vendor
16	Employees creating vendors, approving Purchase orders and processing invoice	Violation of segregation of duties, fraud
17	PO created after the Invoice date	Fraud

6.5.2 Some of the Vendor Frauds Scenarios in SAP

- **Creation of Fake Vendors:**
  Fake vendors created using the t-codes XK01, MK01, and FK01 without making complete entry of the respected vendor's field. Payment to the vendor performed by F-40, F-44, F-48, and F-53. After payment, vendors deleted using t-code XK06.
- **Creation of Duplicate Vendors:**
  Duplicate vendor created with abbreviated vendor names, sharing of the same address or phone number, or other key data elements in vendor master.
- **Flipping Vendor Fraud:**
  Vendor master data fields on bank account modified and payments redirected to another account.. After the payment is made, the the bank details back to the original values
- **Non-Purchase Payments:** The non-purchase payment with collusion is the generation of a purchase record in the system and a payment being made without the purchase actually occurring. The fraud may potentially exist when a user is authorised to create a purchase order by using t-code ME 51 and its approval by using ME58. Further the same person having authority of creation of goods received (t-code MIGO) and invoice verification.

Fraud related audit checks require access to system log, user log, changes in vendor master and to download transaction data.. Audit access the following procurement related tables:

- *EKKO : Purchasing Document Header*
- *EKPO : Purchasing Document Item*

- *EBAN : Purchase Requisition*
- *BKPF   : Accounting Document Header*
- *BSEG   :Accounting Document Segment*
- *LFA1   :Vendor Master (General Section)LFB1 :Vendor Master (Company Code)*
- *LFBK   :Vendor Master (Bank Details)*

6.6 Vendor Master

Vendor Master contains information of a permanent nature, about suppliers/vendors. Such information may be general in nature (name, address etc.) or financial (bank accounts, payment terms etc.) or purchasing information. In SAP, BSNL employees are also vendors. Vendors are classified under the following Groups:

Group	NR	Name
Z001	3	BSNL Domestic Vendor
Z002	4	BSNL Foreign Vendor
Z003	6	BSNL Existing Employees
Z004	7	BSNL Retired Employees
Z005	8	BSNL - One Time Vendor
Z006	5	BSNL - Plants
Z007	9	BSNL HR Third Party
Z008	10	BSNL - DOT vendors
Z009	11	BSNL - Provision vendors
Z010	13	BSNL- Hospital Vendor
Z011	4	BSNL- Telecom Operators
Z012	12	BSNL- Electricity Vendor
Z013	14	BSNL RENT Vendor
Z014	15	BSNL NOFN Vendor
Z015	16	BSNL Entry Tax Vendor
Z016	17	BSNL Import Vendor-Domestic
Z017	3	BSNL TSM and Casual Labour
Z018	18	BSNL Franchisee Vendor
Z019	3	Inter Circle Roaming Vendor
Z020	3	Intra Circle Roaming Vendor
Z021	3	BSNL FMS Vendors
Z022	3	BNP2 - EPC
Z023	3	BNP2 - NON EPC

6.6.1 Display Vendor Master

(Ref para 6.6 for details on Vendor Master)

T/Code: ZFI172

Eg to view foreign vendors, enter the Vendor Account Group as **Z002** and give the Company Code.

Screenshot 6.1: To view Foreign Vendors

The Vendor Master Report in r/o foreign vendors is displayed as below:

Screenshot 6.2: Vendor Master Report

6.6.2 Vendor List

Vendor List is a list of all approved vendors in the Company.
Report: S_alr87012086

Screenshot 6.3: To view Foreign Vendors

The Vendor List is displayed as below:

Screenshot 6.4: Vendor Master Report

6.6.3 View Details of a Particular Vendor

T/Code: XK03

We can view all information about the vendor using the above T/Code.
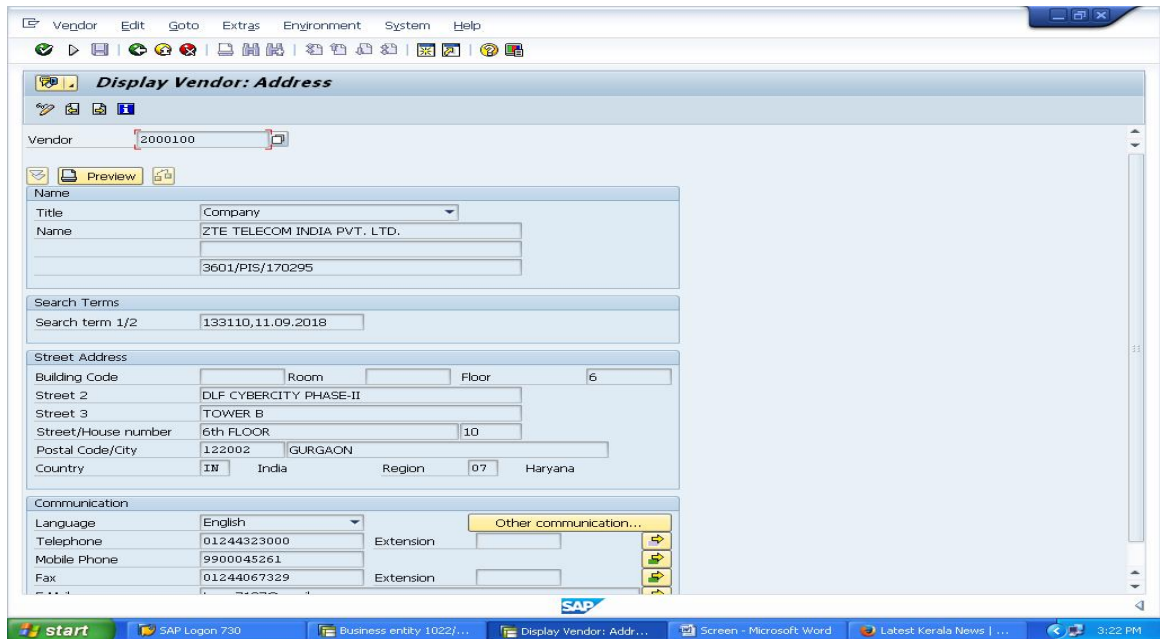
Eg. To get the details of vendor Z000100, type the vendor code and select the Company Code Purchasing Organization, tick the details required and execute.

Screenshot 6.5: Display Vendor

The Vendor Details are displayed as below:

Screenshot 6.6: Display Vendor

6.6.4 Display Changes in Vendor Master

SAP will automatically maintain a log on all changes made in the Master Data. Auditors can ensure whether such changes were authorized and accurate using the following Reports:

- **Display of vendor changes:** **Report RFKEPL00, T/Code S_ALR_870012089**: this report provides a list of vendor master records that have been changed. It shows the original and changed fields and values as well as details on which user performed the changes.
- **List of new vendors:** **Report RFKKVZ00, T/Code S_ALR_87012086**: this report provides details of all new vendor created for the selected date range.
- **Display of bank account changes:** **Report RFKABL00, S_ALR_87012089, S_P00_07000008:** this report should also be reviewed regularly to ensure that changes made to bank master data are authorized.

6.6.5 One Time Vendor (OTV)

One-time vendors are vendors with whom transactions are made only once or very rarely. No master data is created in Vendor Master for one time vendors. The details of the vendor are entered only at the time of entering the invoice. One Time Vendor is to be controlled since there is risk of fraudulent payments through manipulating Alternate Payee field.

Invoices that do not have a valid purchase order in the system (i.e. utility payments) should be processed separately via the Financial Accounting Accounts Payable module. These invoices are not subject to requisition approvals. Use of the one-time vendor function eliminates typical vendor master file controls, including vendor approval, vendor tolerances, and standard terms of payment. In the case of One Time Vendors, details such as bank account, name, address etc. are entered at the same time of processing the invoice.

OTV: Audit Checks

- *Whether payments of regular nature are processed through One Time Vendor?*
- *Whether any periodical monitoring is done by the Management on One Time Vendor payments?*
- *Whether adequate safeguards against frauds were taken in One Time Vendor payments?(Eg. (i) Payment release in conjunction with 'park and post'. (ii) All invoices beyond a certain amount are authorized in accordance with approved delegation levels)*
- *The vendor line item report RFKEPL00, transaction code S_ALR_87012103, is the best.*

6.7 Purchase Requisition

Purchase Requisition is the primary document in the purchasing cycle. Each requisition is assigned a PR number which is subject to release/approval through a workflow process.
The requisition authorizes the Purchasing department to purchase materials in specific quantities within a specified time frame. It is an internal document and is not used outside of the company.

6.7.1 Display a particular PR (say 4000110231)

The options are:

T/Code	ME53N
SAP Menu	Information System>Logistics>Purchasing>Purchase Order>Purchase Requisition>Display

It will display the screen for the last display. Go to Purchase Requisition in the top menu bar, click 'other PR' and type the PR number. For example, PR No 4000110231.

The PR is displayed as below:
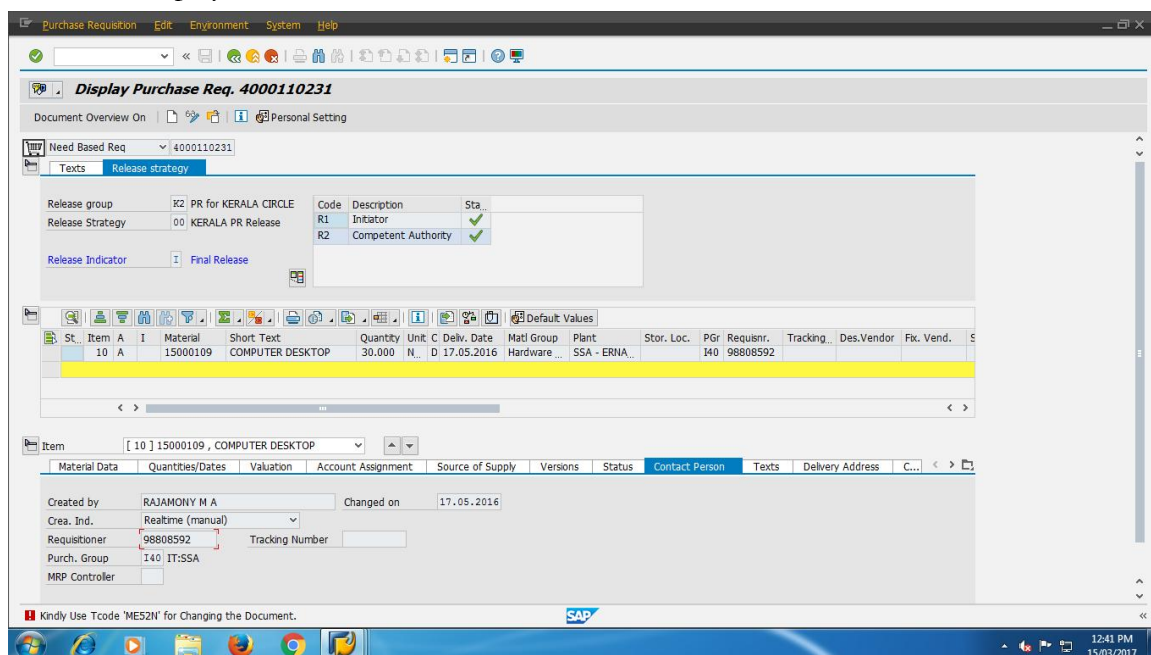
Screenshot: Purchase Requisition Display

To check the stock position of the required material, select the line item in the above screen, click environment on top menu bar and click 'Material Stock'.

6.7.2   Display List of PRs

T/ Code	ME5A
SAP Menu	Logistics> Materials Management> Purchasing> Purchase Requisition> List Displays> General

Eg. View PRs in r/o Kollam SSA under Kerala Circle (Plant 2206). Enter 2206 against
Plant and press F8 or the Execute icon at the left hand side of the top of the screen.
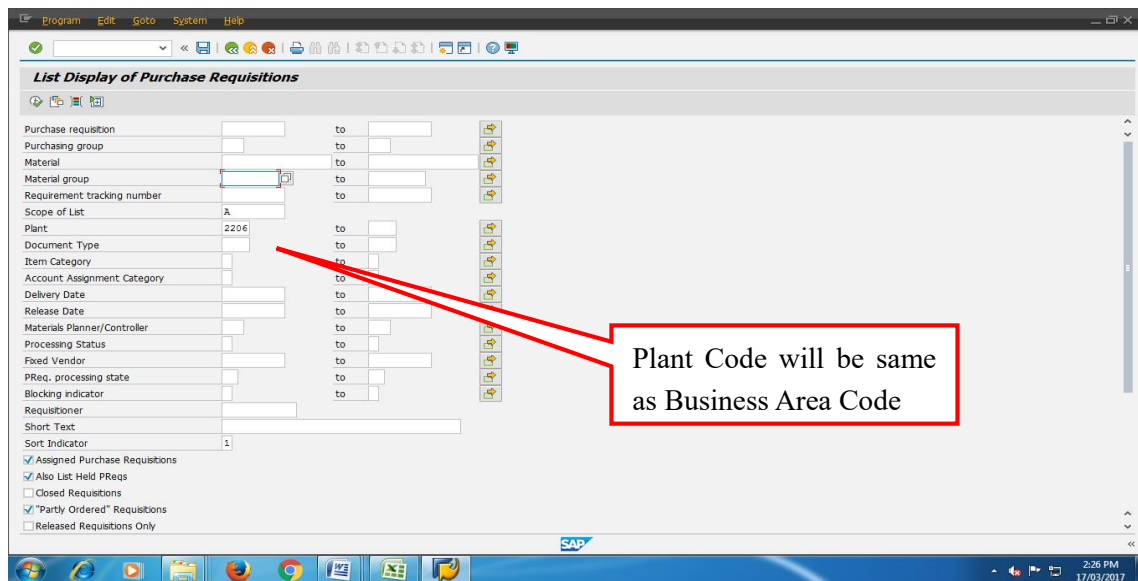
Screenshot 6.8: Purchase Requisition Display

Purchase Requisition List is displayed as below:

Screenshot 6.9: Purchase Requisition List Display

This screen allows us to view the requisition number, material, requested quantity, ordered quantity, delivery date, material group, and plant.

To view the Purchase Requisition details, click the line item. Eg. To view PR 4000008403, click the line item. The PR is displayed as below:
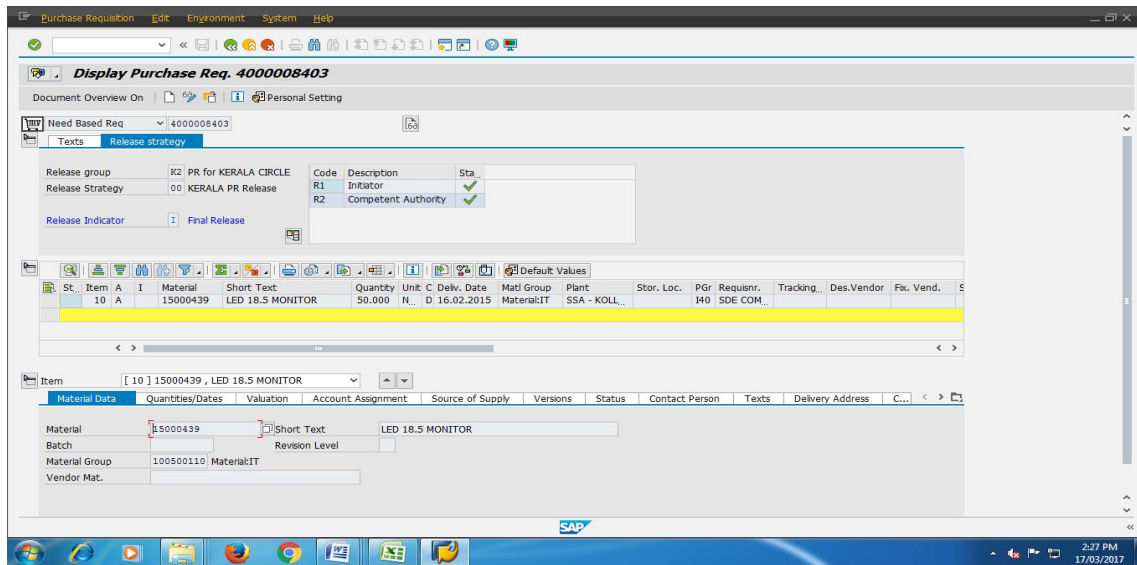
Screenshot 6.10: Purchase Requisition Display

Details on Material data, quantity, valuation, accounts assignment, source of supply, version, status, contact person, text, delivery address, customer data etc can be viewed on clicking the relevant tabs.

6.7.3   Material Data

Material data will give more details about the material requisitioned.

To view the Material Data, click 'Environment' in the Menu Bar and select Material
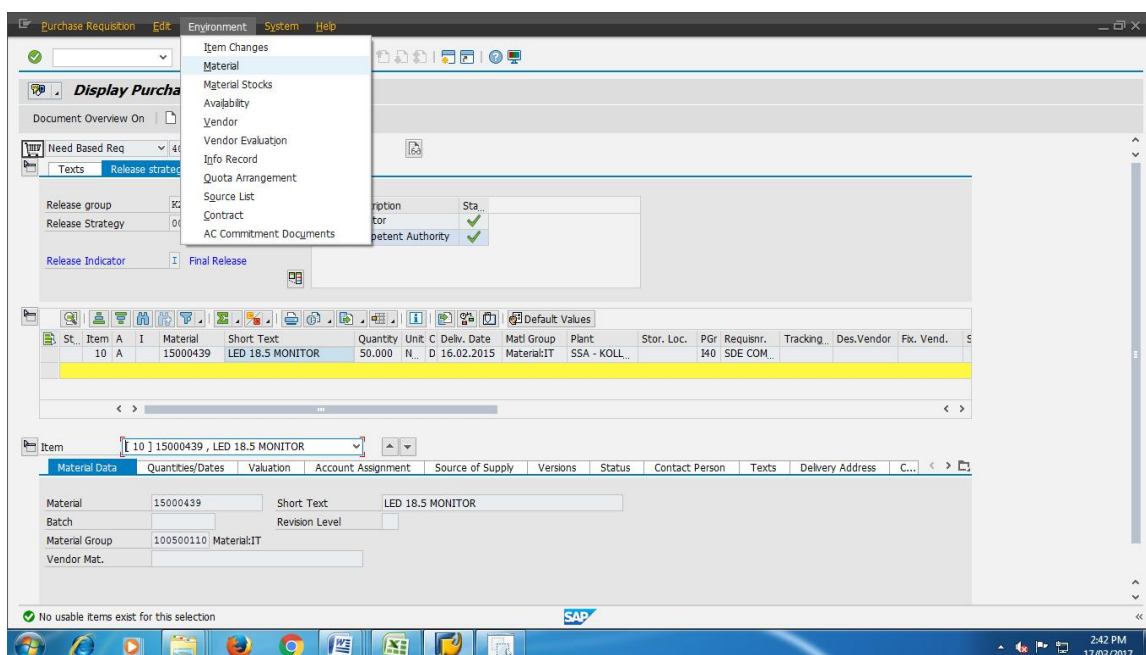
Screenshot 6.11: To View Material data

Material data is displayed as below:

Screenshot 6.12: Display Material

6.7.4   Stock Overview

Stock overview will give Company Code-wise and Business Area-wise stock position of the material. To view the stock overview of the material requisioned, click Environment and select 'Stock Overview'.

The information will help the audior in deciding whether there was justification for fresh procurement when sufficient stock was available.

Screenshot 6.13: To view stock overview

Stock Overview is displayed below:
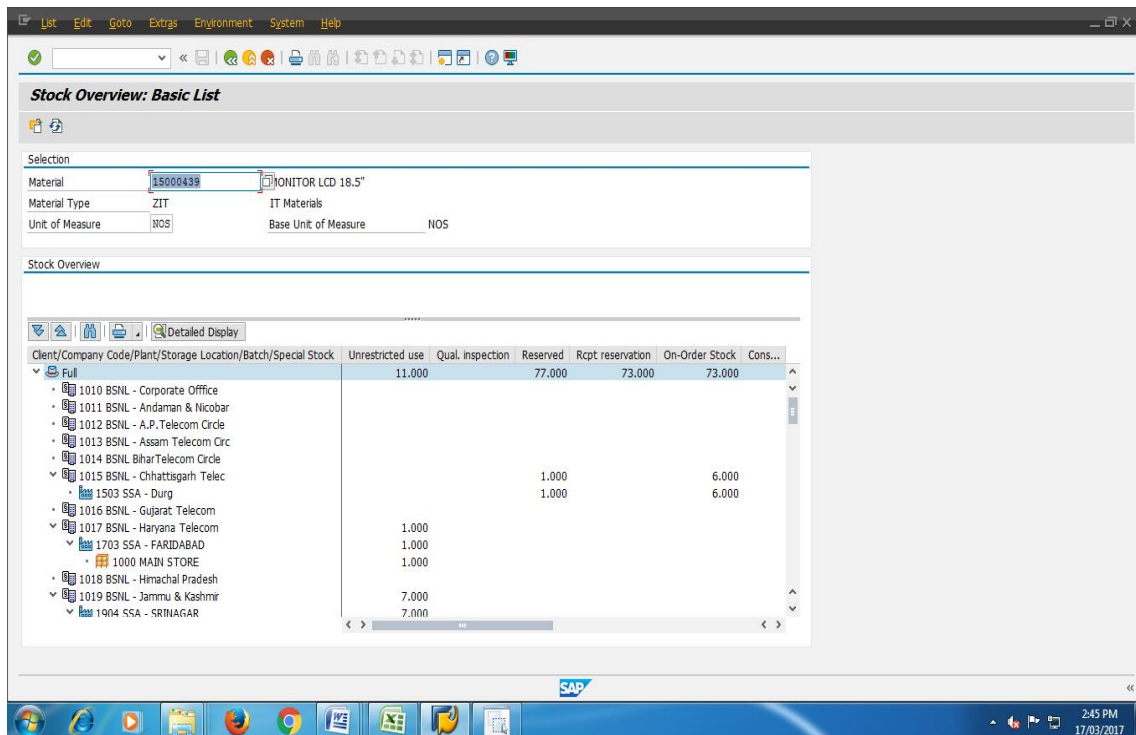
Screenshot: 6.14: Stock Overview

6.7.5 Stock Overview of any Material

T/Code: MMBE

Eg. Stock Overview of VRLA Battery 44V 200AH (Material Code 12003805) in r/o Kottayam SSA. Storage locations- 0001 to 3032
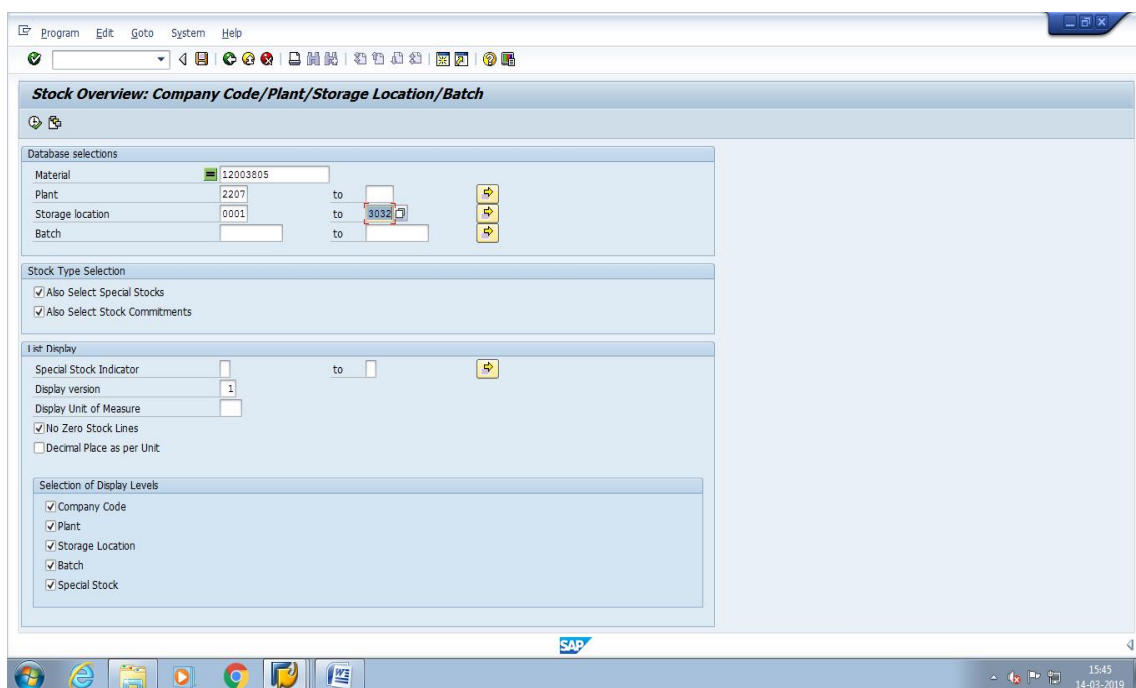
Screenshot: 6.15: Stock Overview

Stock Overview is displayed as below:
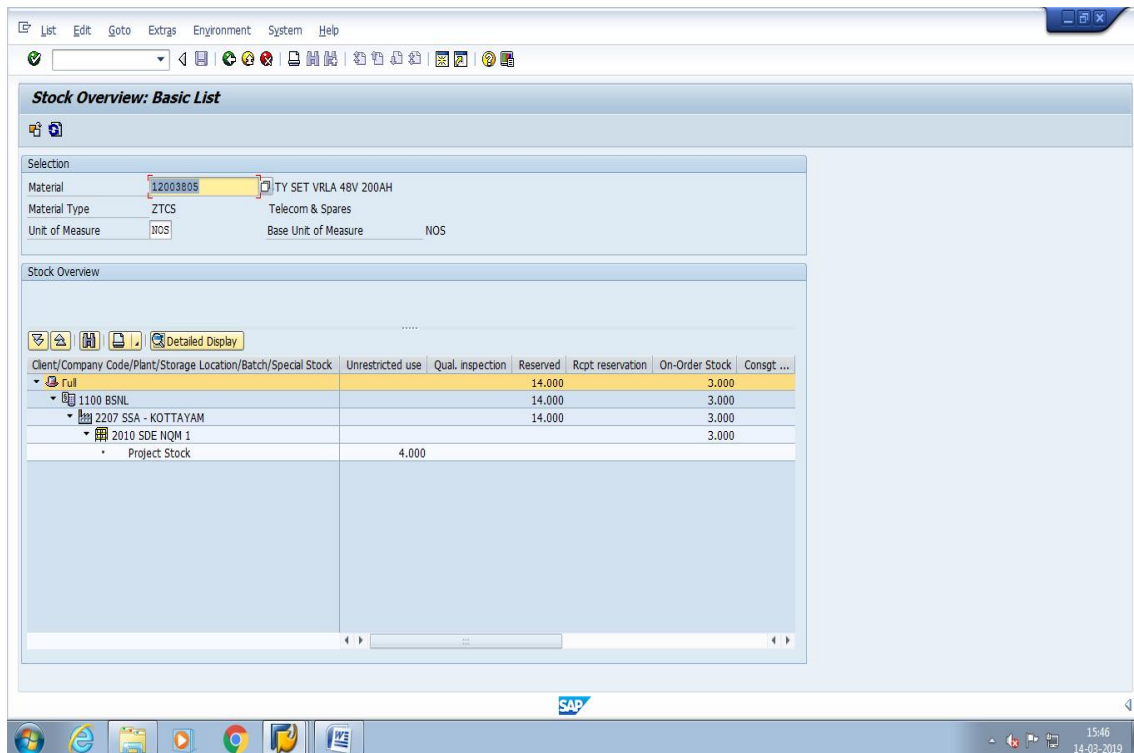
Screenshot: 6.16: Stock Overview
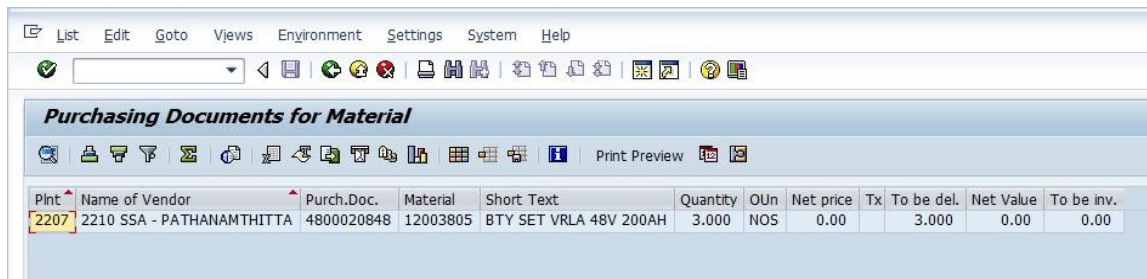
To view the PO in r/o the above material

Go to 'Environment' in the top menu bar and click 'Open Purchase Orders' as below:
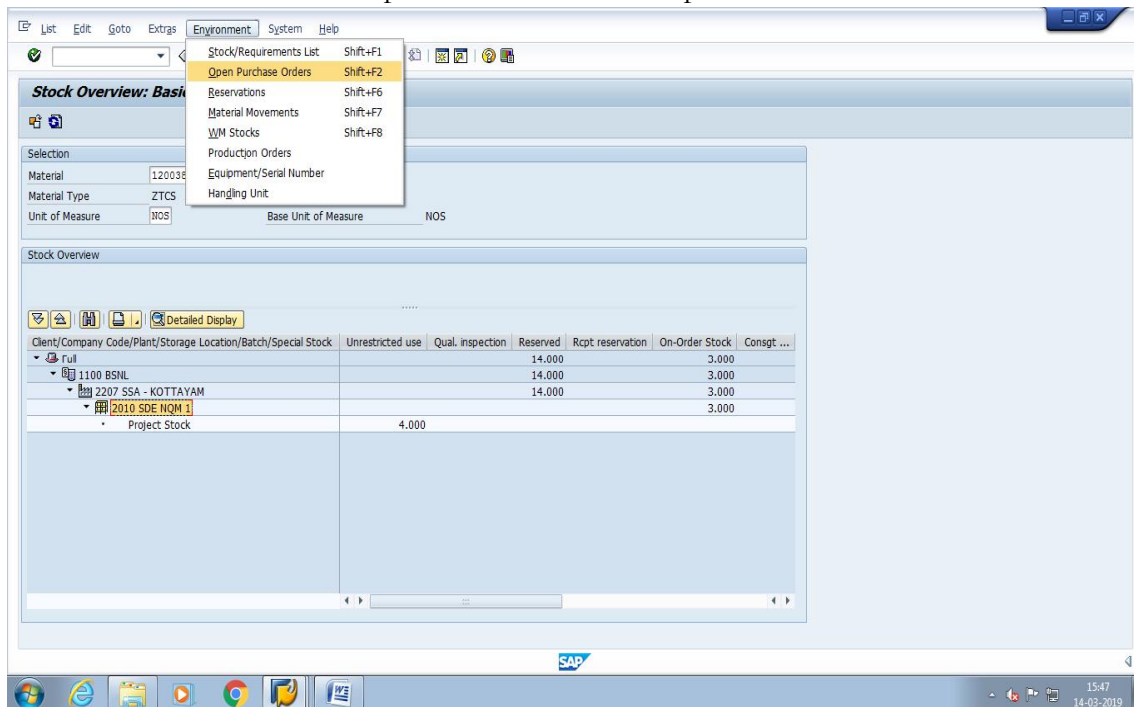
Screenshot: 6.17: Stock Overview
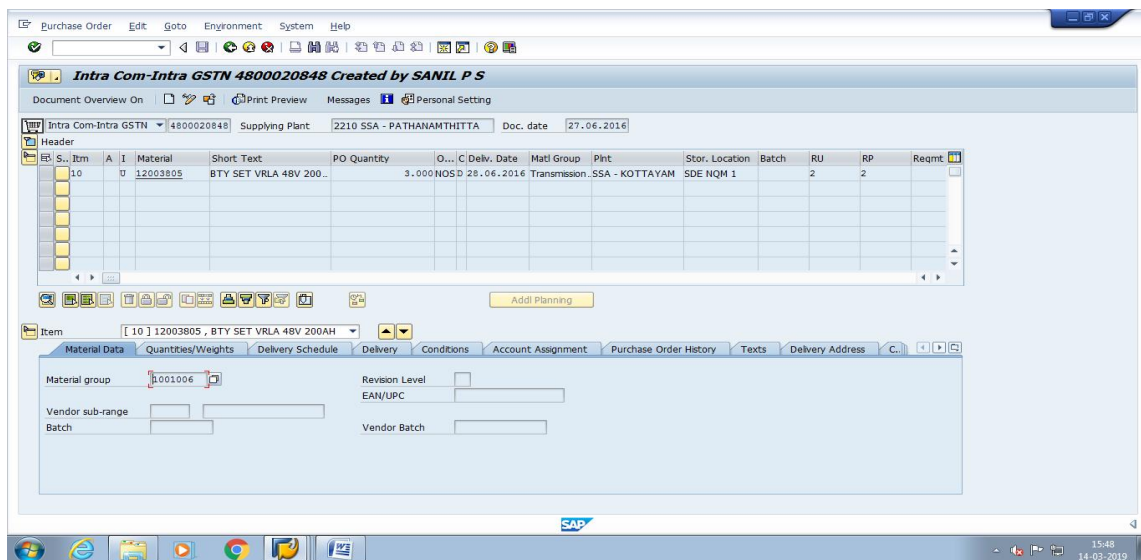
The next screen will display the Purchase Document as below:

Screenshot 6.18: Display PO

Click the 'Purch.Doc.' to view the PO. PO is displayed as below:

Screenshot 6.19: Display PO

6.8 Requests For Quote (RFQ)

RFQ is created in SAP for a single item or for multiple items. Creating master record for the vendor in Vendor Master is a pre-requisite for issuing RFQs. RFQs can be created based on purchase requisition from user department or without any such requisitions under certain circumstances.

To view the RFQ

Transaction Code	ME48
Menu	Logistics > Materials Management > Purchasing > RFQ/Quotation > Quotation > Display

On the "Display Quotation: Initial Screen" screen, enter information in the fields as specified in the table below:

Fig: 6.20: To Display Quotation

Press the Enter key or click on the icon .

On the "Display Quotation: Item Overview" screen the following data will be returned in display-only format:

Fig: 6.21: Display Quotaion

In the event that the header data needs to be displayed, use the menu path Header → Details, or click on the Display Header icon. On the "Display Quotation: Header Data" screen the following data will be returned in display only format:

Screenshot 6.22: Quotation Header Data

Note:

T/Code: ZMMF_PC and ME49 will display the Price Comparison of RFQs. There is no access privilege to these T/Codes for audit.

6.9 Purchase Orders (POs)

An understanding on the types of POs, Purchasing Groups and Payment Terms & Conditions will help in the audit of procurement.

6.9.1 Types of POs in BSNL

Cat	Type	Doc. Type Descript.	Cat	Type	Doc. Type Descript.
A	AB	Not Applicable		ZGTE	Inter Com-Intra GSTN
A	AN	Not Applicable	F	ZGTO	Intra Com-Inter GSTN
A	ZLQ	Local Inquiry	F	ZIMP	Import PO
A	ZRFQ	Req. for Quotation	F	ZLPO	Local Purchase Order
B	FO	Not Applicable	F	ZNBO	Need Based Order
B	NB	Not Applicable	F	ZNPO	Non-POC Order
B	RV	Not Applicable	F	ZRCO	Rate Contract Order
B	ZAPR	Annual Purchase Req	F	ZRPO	Regular Purchase Order
B	ZNBR	Need Based Req	F	ZSRO	Service Order
B	ZRCR	Rate Contract Req	F	ZSTE	Inter Com-Inter GSTN
B	ZSDR	Stock Diversion Req	F	ZSTI	Intra Com-Intra GSTN
B	ZSRR	Service Requisitions	F	ZTPS	PO Third Party Sale
B	ZSTR	Annual Stock Trf Req	F	MK	Quantity Contract
B	ZTPS	PR Third Party Sale	K	WK	Value Contract
F	DB	Not Applicable	K	ZAED	Educational APO
F	EUB	Not Applicable	K	ZANB	Need Based APO
F	FO	Not Applicable	K	ZAPO	Advanced Pur Order
F	NB	Not Applicable	K	ZARC	Advan Rate Contracts
F	UB	Not Applicable	K	ZASR	Service Contracts
F	ZDGO	DGS&D Order	K	LP	Scheduling Agreement
F	ZEDO	Educational Order	L	LPA	Scheduling Agreement
F	ZEMO	Emergency Order	L	LU	St. Trnsp. Sch. Agmt

6.9.2 Purchase Groups

BSNL has the following Purchase Groups in SAP. POs can be viewed Purchase Group-wise also.

PGr	Description	PGr	Description	PGr	Description
10	MMCl: Corporate	430	Tel EB: Circles	I10	IT: Corporate
20	MMCl: Factories	510	Tel IS: Corp	I30	IT: Circles
30	MMCl: Circles	A10	Admin: Corporate	I40	IT: SSA
40	MMCl: SSA	A30	Admin: Circles	I50	IT: Maint Region
50	MMCl: Maint Reg HQ	A40	Admin: SSA	I60	IT: Project Circles
51	MMCl: Maint Reg	A50	Admin: Maint Reg.	I70	IT: Trng Center

60	MMCl: Proj HQ	A60	Admin: Projects	M10	Mktg: Corporate
61	MMCl: Proj Area	A70	Admin: Trn	M30	Mktg: Circles
110	Tel ILD: Corp	C30	Civil: Circles	M40	Mkt: SSA
130	Tel ILD: Circ	C40	Civil: SSA	O30	Operations: Circles
150	Tel ILD: Main	C70	Civil: Trng center	O40	Operations: SSA
210	Tel CMTS: Corp	E30	Elect: Circles	O50	Operations: Maint.
230	Tel CMTS: Circles	E40	Elect: SSA	O60	Operations:Project
310	Tel VAS: Corp	E70	Elect: Trng Centre	O70	NGN:Trng Centre
330	Tel VAS: Circles	F10	Finance: Corporate	R70	Repair:Trng Centre
410	Tel EB: Corp	F40	Finance: SSA		

6.9.3 Payment-Terms & Conditions

Pay Types	Explanation	Pay Types	Explanation
1	Payable immediately Due net	8	For incoming invoices until 15 of the month
2	Within 14 days 2 % cash discount		Within 14 days 2 % cash discount
	Within 30 days Due net		Within 30 days 1.5 % cash discount
3	Within 14 days 3 % cash discount		Within 45 days Due net
	Within 20 days 2 % cash discount		Baseline date on 30 of the month
	Within 30 days Due net		For incoming invoices until month End
4	Payable immediately Due net		Within 14 days 2 % cash discount
	Baseline date on End of the month		Within 30 days 1.5 % cash discount
5	Payable immediately Due net		Within 45 days Due net
	Baseline date on 10 of next month		Baseline date on 15 of next month
6	Before End of the month 4 % cash discount	9	Payable in 3 partial amounts
	Before 15 of the next month ;; 2 % cash discount		1 installment: 30.000 % with payment term 0001
	Before 15 in 2 months Due net		2 installment: 40.000 % with payment term 0001
7	For incoming invoices until 15 of the month		3 installment: 30.000 % with payment term 0001
	Before 15 of the next month ;; 2 % cash discount	P001	As per Payment Clause in Purchase Order
	Before End of the next month ;; Due net	P002	Payable in 3 partial amounts
	For incoming invoices until End of the month	P003	Payable in 2 partial amounts
	Before End of the next month ; 2 % cash discount	Z001	Payable immediately Due net
	Before 15 in 2 months Due net		

6.9.4 Display Purchase Order

POs can be viewed for a particular vendor, material, material group, tracking number, PO number or Supplying Plant. These can be accessed through the SAP menu or using the following Transaction Codes:

Vendor   : ME2L
Material   : ME2M
Material Group   : ME2C
Tracking Number: ME2B
PO Number   : ME2N
Supplying Plant   : ME2W

6.9.5 View details of all POs placed by a Circle (Eg Kerala)

Option 1:

SAP Menu: Go to Logistics-Purchase Order-List Details. You can use any of the sub menu functions (By vendor, By Material or By PO Number).
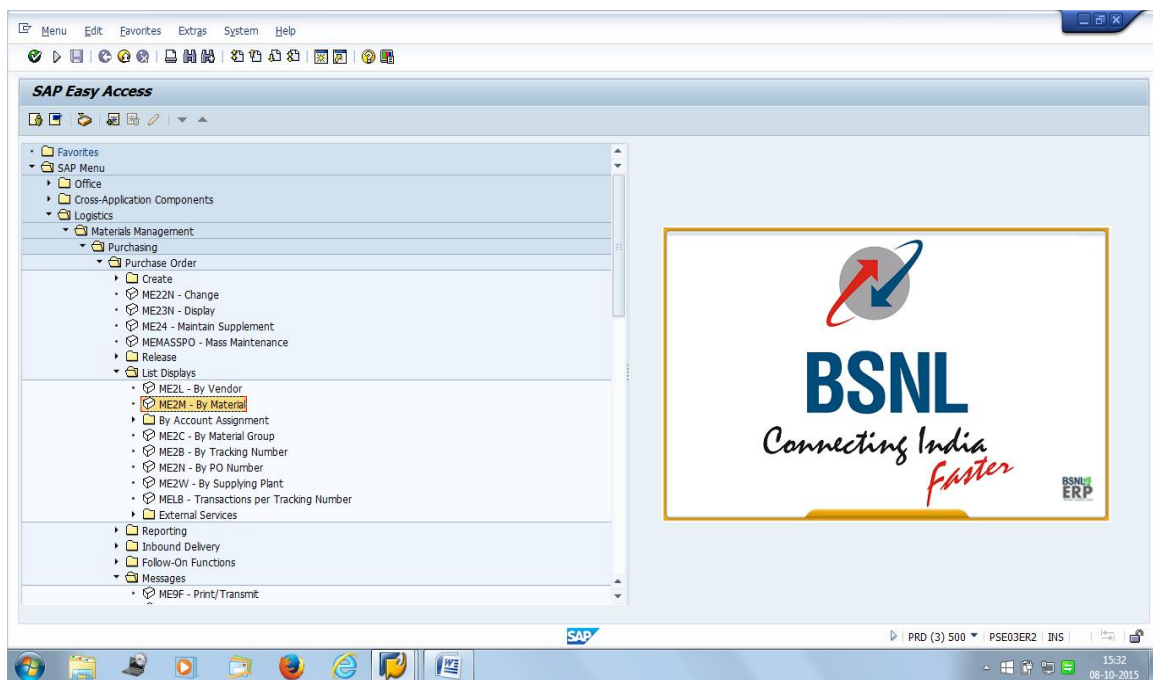
Screenshot 6.23: View PO By Material Menu

Type the plant number 2201 for Kerala Circle Office and press F8..

We can also select other criterial also from the following screen.

`Screenshot 6.24: PO for Mateial Input Screen*

A list of POs placed by the Kerala Circle is displayed as below:

Screenshot 6.25: POs for Materials

6.9.6 View a particular PO from the above list

For Eg. Toview the PO No 4200053565, click the line. The PO will be displyed as below:
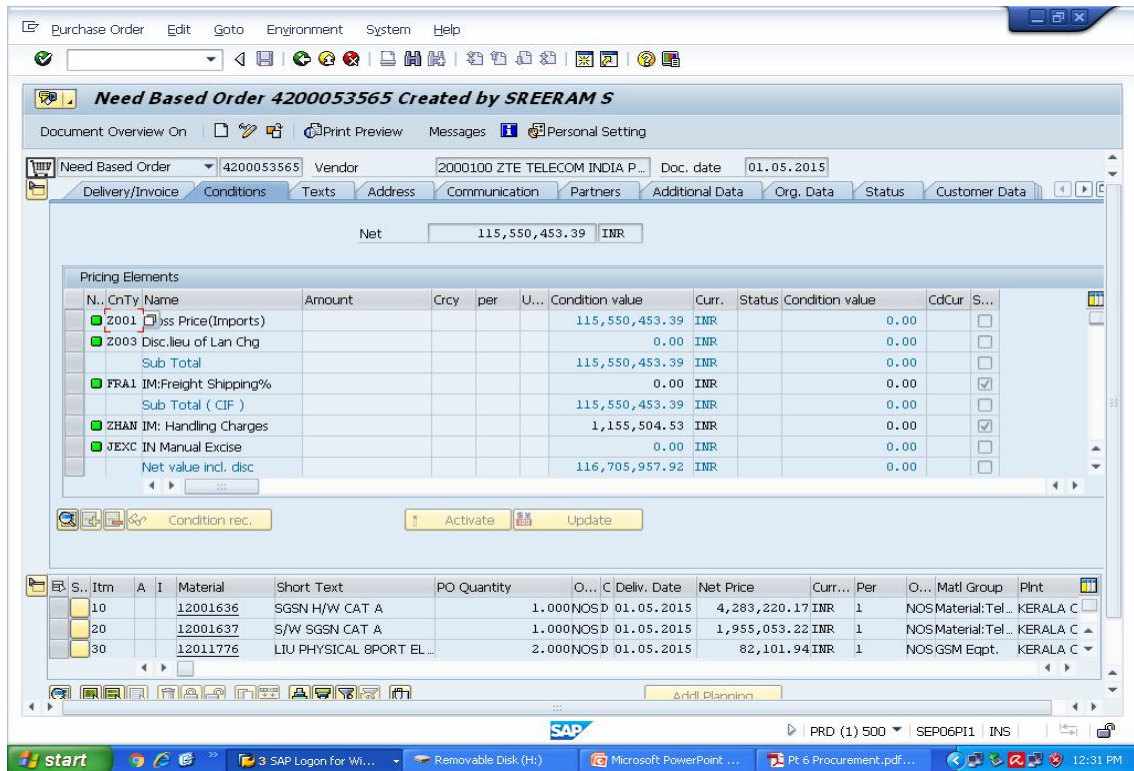
Fig: 6.26: PO View

6.9.7 Parts of a PO

A PO in SAP has three parts, viz. **Header, Item Overview, Item details** as shown below:
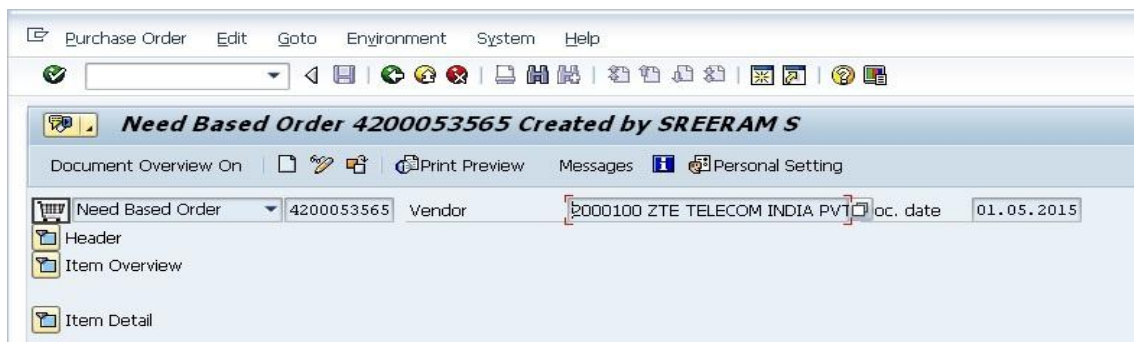
Screenshot: 6.27: Prats of a PO

6.9.8 Header Details

PO Header has details on Delivery/invoice, conditions, Texts, Address, Communication,Partners, Additional Data, Organizational Data, Status and Custmer Data.

The PO Conditions are displayed in the screen below:
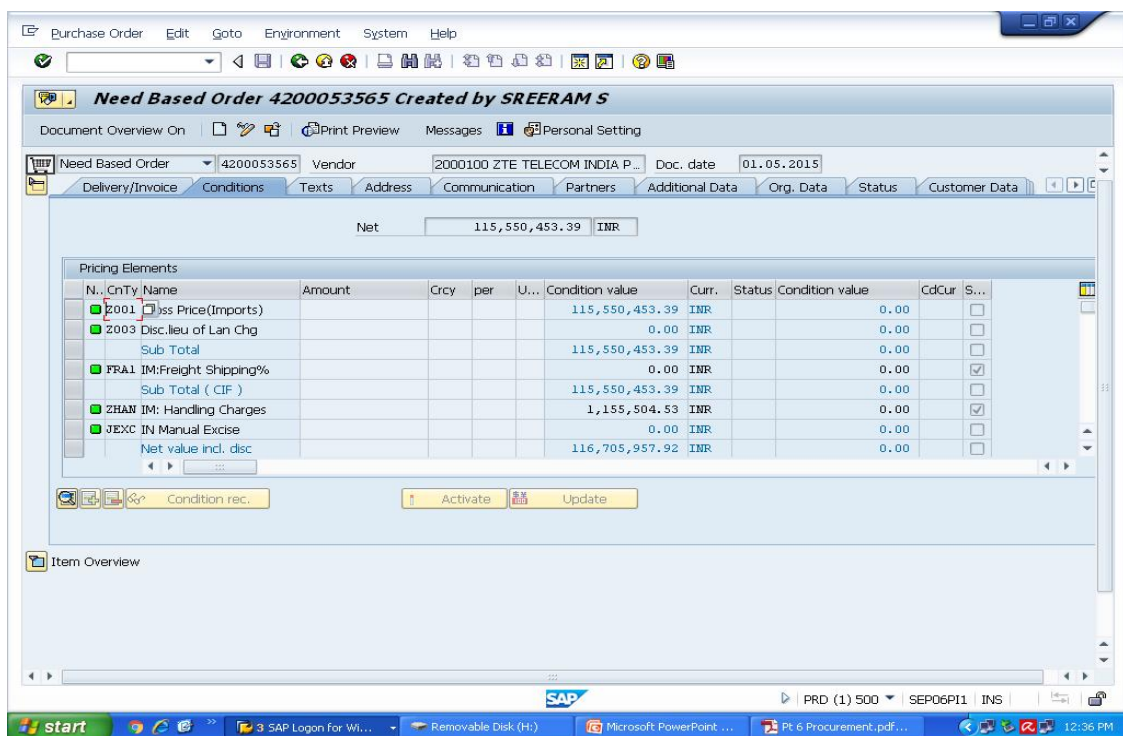
Screnshot: 6.28: PO Header

6.9.9 Item Overview

Item overview contains a description of the items ordered, plus the quantity, price, unit of measure, account assignment, and other details specific to each item. It also contains the account assignment category and item category which work together with the PO document type to define the purchase type and to determine what type of cost object, if any, to expect.

Item Overview will give details like Item material Code, Vendor, PO Quantity, Unit, Delivery Date, Net Price, Currency, Material Group, Plant, Storage location etc as displayed in the screen below:
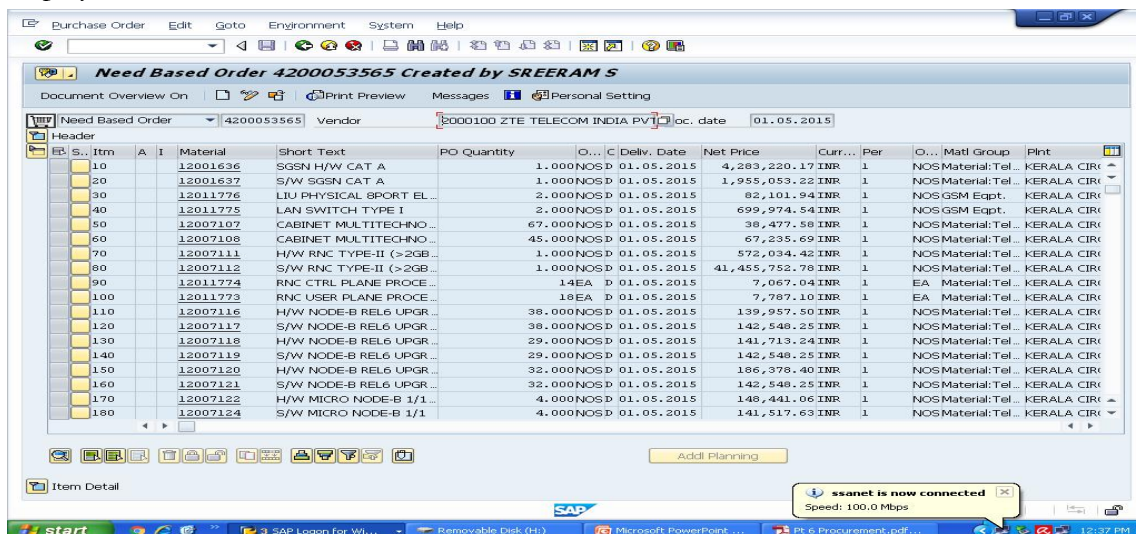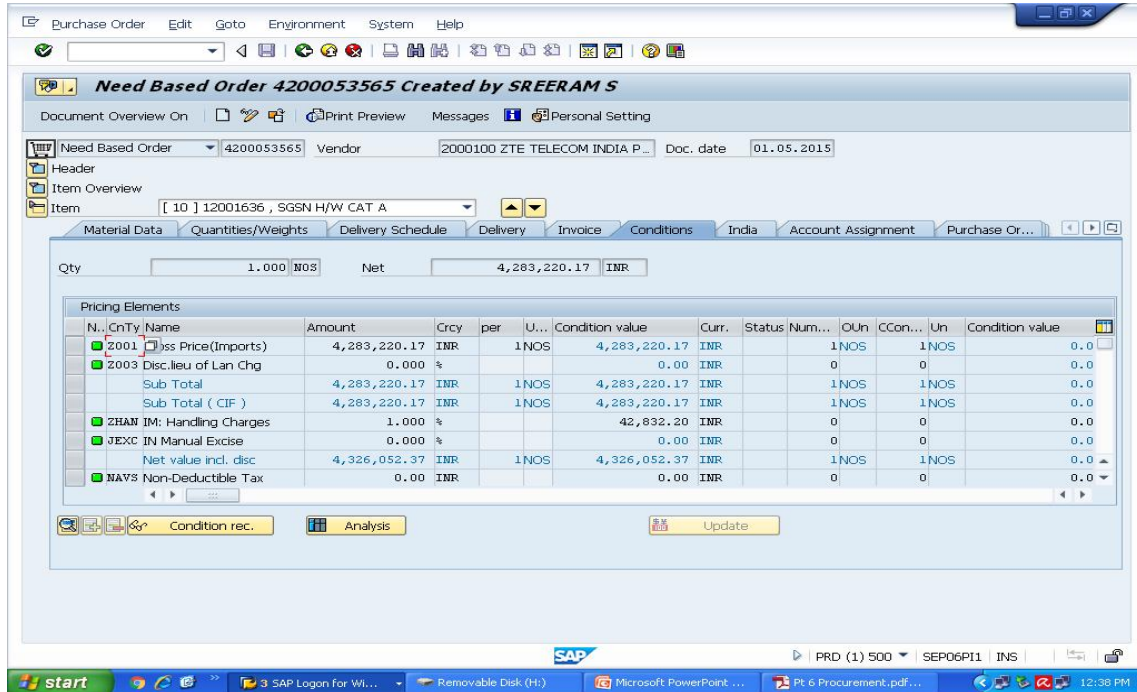
Fig: 6.29: PO Item Overview

6.9.10 Item Details

Item Details will give details on Material data, Warranty/Weight, Del Schedule, Delivery, Invoice, Conditions, Account Assignment etc. The Conditions on the above PO are displayed in the screen below:

Fig: 6.30: PO Item Details

6.9.11 Payment Terms

In SAP payment conditions are denoted by the relevant codes. For example in the above PO, payment condition is denoted by 'Z001' which means 'Payable Immediately Due Net'.

Fig: 6.31: Terms of payment

6.9.12 Conditions- Price break-up

Conditions will give the pricing elements like basic price f the item, freight, handling charges, insurance, tax etc.

Fig: 6.32: Price break up

6.9.13 Organizational Data

Organizational data will give the Purchase Organization, Purchase Group and the Company Code as in the following screen:

Fig: 6.33: Organizational Data

Purchase Organizations: There are two Purchase Organizations, viz. 1000: Centralized 2000: Decentralized.

6.9.14 PO Status

PO Status will give details like order value, value of items delivered, Still to Deliver, Invoiced amount, Down Payment etc as shown below:

Fig: 6.34: PO Status

6.9.15 Payment Release Strategy

In release strategy refers to the authorization to release POs based on the financial powers. Release Strategy is indicated in different codes. The release code is a two character ID allowing a person to release (clear, or approve) a purchase requisition or an external purchasing document.

Payment Release Strategy will give details of Release Group, Release Strategy, Initiator, Competent Authority and Release Indicator as shown below:

Fig: 6.35: Payment Release Strategy

6.9.16 View Item Changes

Click 'Environment' and select 'Item Changes' in respect of the selected material. For Eg. To view the item changes for Material 12001636, select the line item, go to 'Environment' in the top menu and click 'Item Changes' as shown below:
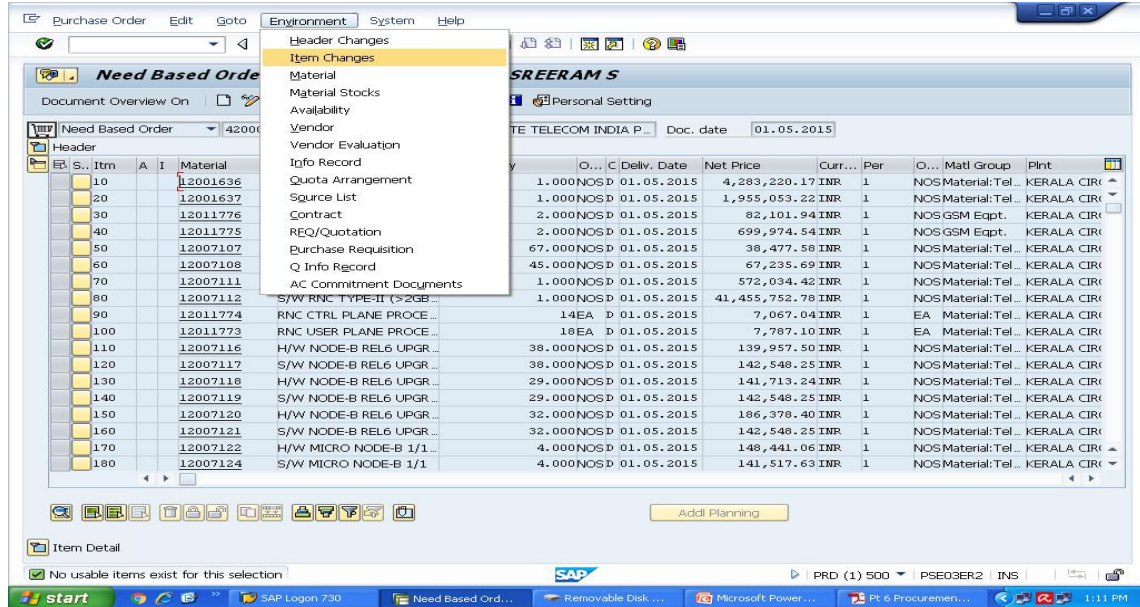
Fig: 6.36: To View Changes in a PO

The changes in the PO are displayed as below:
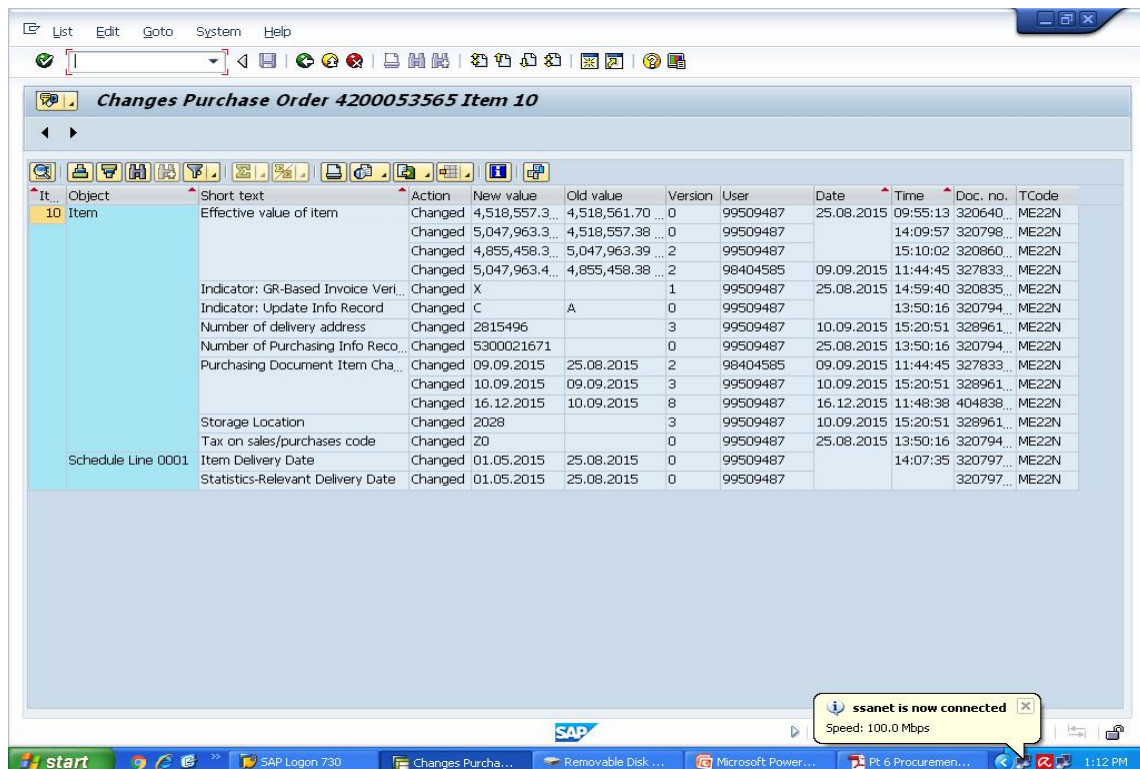
Screenshot 6.37: Changes in a PO Display

6.9.17 Delivery Schedule

It will give the Delivery Date and Status of Delivery as shown below:

Screenshot 6.38: Delivery Schedule

6.9.18 PO-Payment Status

Click PO History Display: To check the payment details for line item 5105913389, click the line item as shown below:

Screenshot 6.39: To View Payment status

The Payment Details are displayed as below:
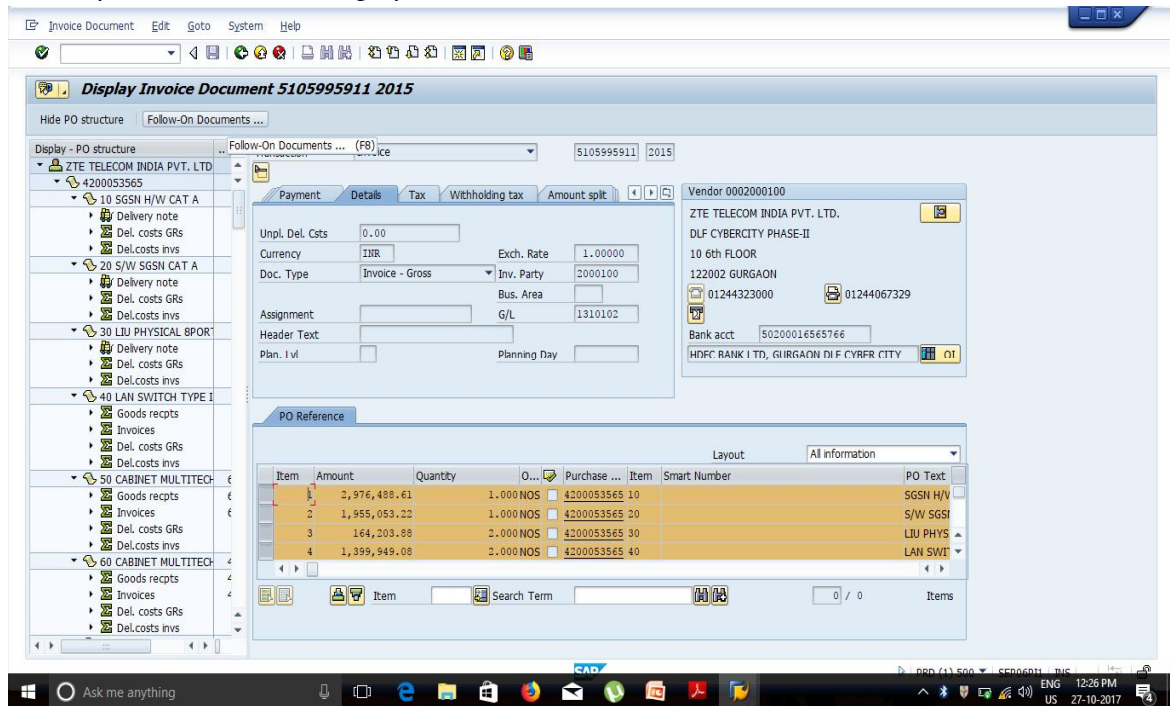
Screenshot 6.40: Payment- Invoice Display

To view the Document, click the purchase doc number. Document is displayed as below:
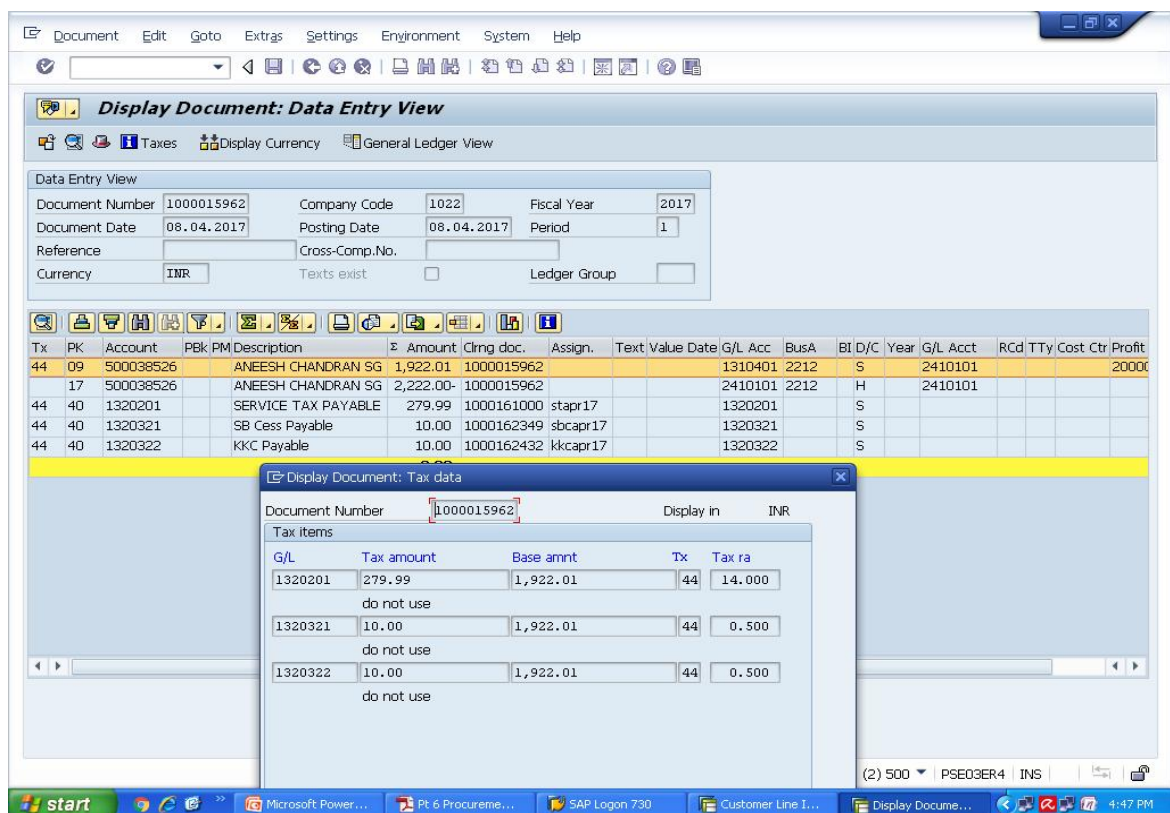
Screenshot 6.41: Document

6.9.19 Accounting Document

To view the Accounting document, click the document and select 'Accounting Document' as below:
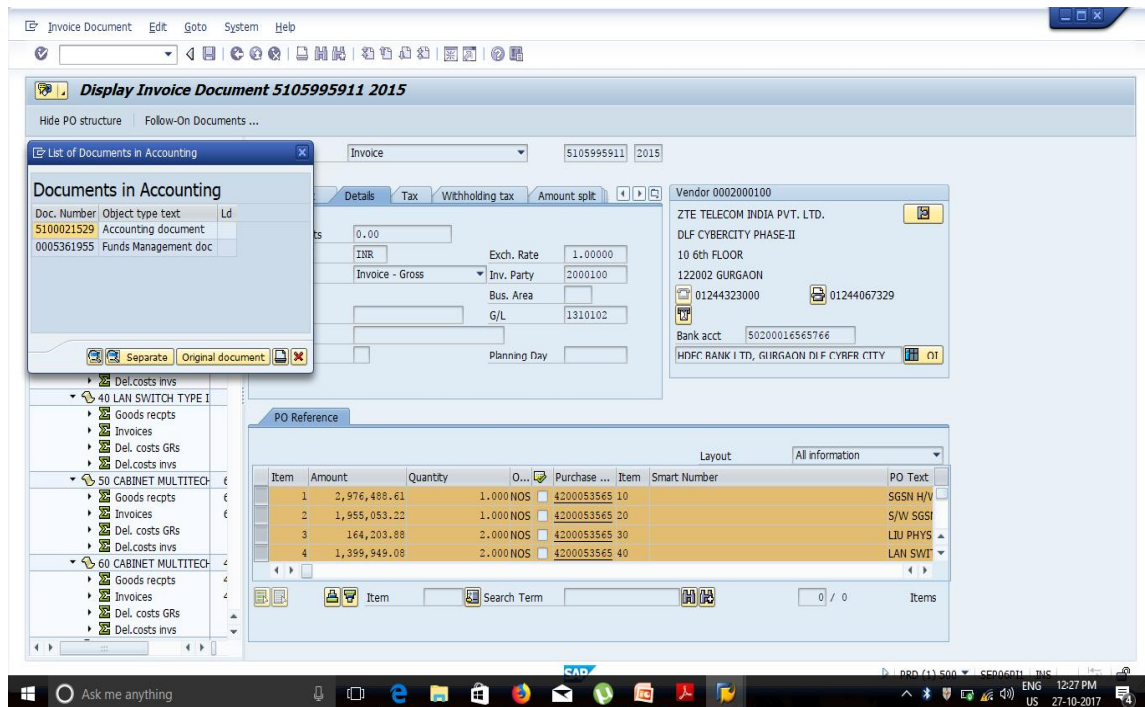
Fig. 6.42: To View Accounting Document

6.9.20 Clearing Document

Eg. To view the Clearing Document in r/o the first line item, click the line item.
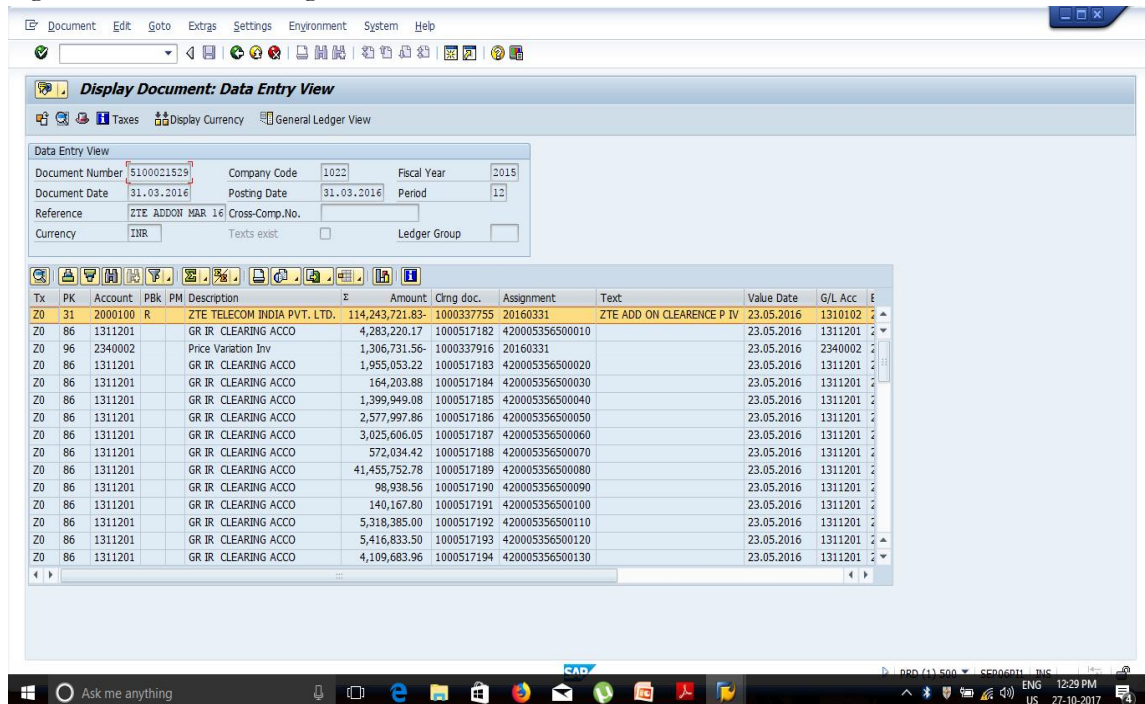
Fig. 6.43: To View Clearing Document

The Clearing Document is displayed as below:

Fig. 6.44: Clearing Document Display

6.9.21 Display Purchase Order by Order Number

Transaction Code	ME23N
Menu Path	Logistics>Materials Management>Purchase>Purchase order>Display

System by default displays the most recently opened Purchase order. To display another PO, type the PO number and execute.

Display purchase order can also be viewed from transaction **ME21N** by clicking on the button.

Note: By default the PO No last searched by the user will be displayed. If you don't want to work with the defaulted purchase order, click on the 'Other Purchase order' button on the header bar (It has been shown with an arrow).Enter a unique purchase order number that requires to be displayed.

Fig. 6.45: To Display PO

The PO is displayed as below:

Fig. 6.46: PO Display

6.9.22 Display PO History

The purchase order history will give all the transactions (Qty supplied, invoice received, payment made etc) in connection with a PO till date. It offers different views like:

- The invoices received and their clearing value
- The quantity in "blocked stock"
- Delivery costs
- The assignment of GR and IR documents in the case of items subject to GR-based invoice verification

To display the PO history, select the item and choose ▶ Item ▶Statistics ▶PO history ▶
To switch between views, choose Views.
To know whether a PO has been Paid
Go to the PO in display mode using TCode ME23N and click the tick icon.
Under the PO History tab, click on Material Document No.
Click on "Follow-on Documents" and pop-up will appear.
In the pop-up window, double click on accounting document number.
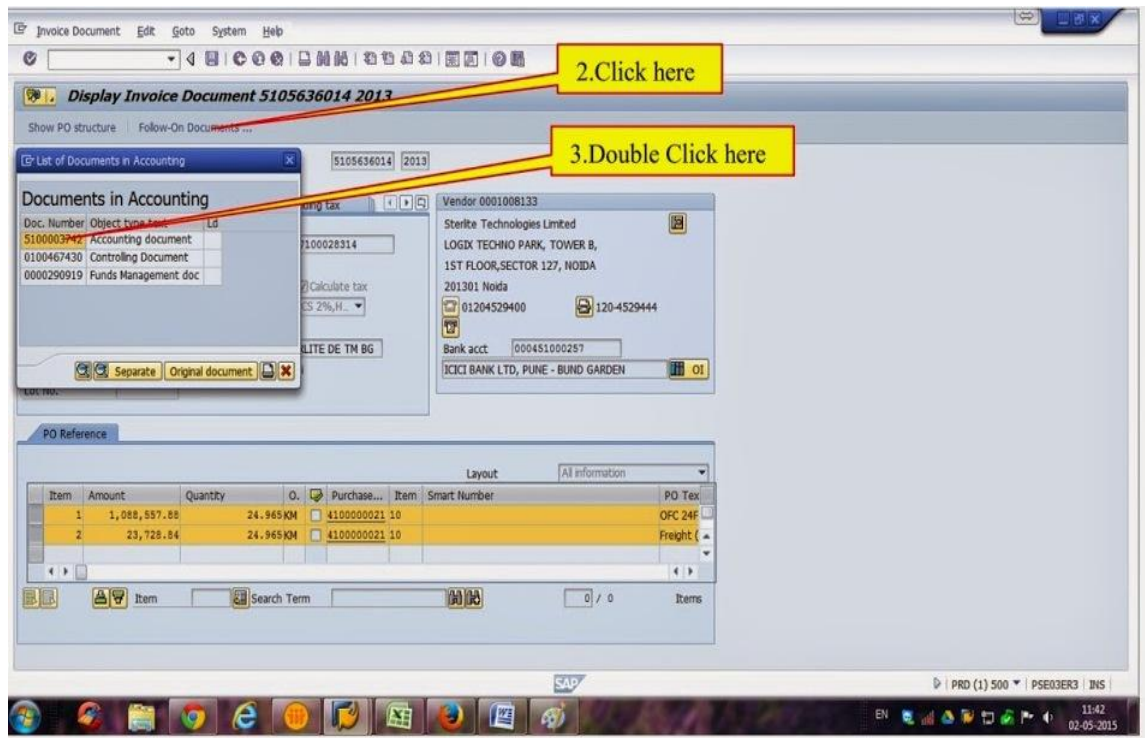
Fig. 6.47: To View PO History

n the following screen double click on Vendor Account No.1008133
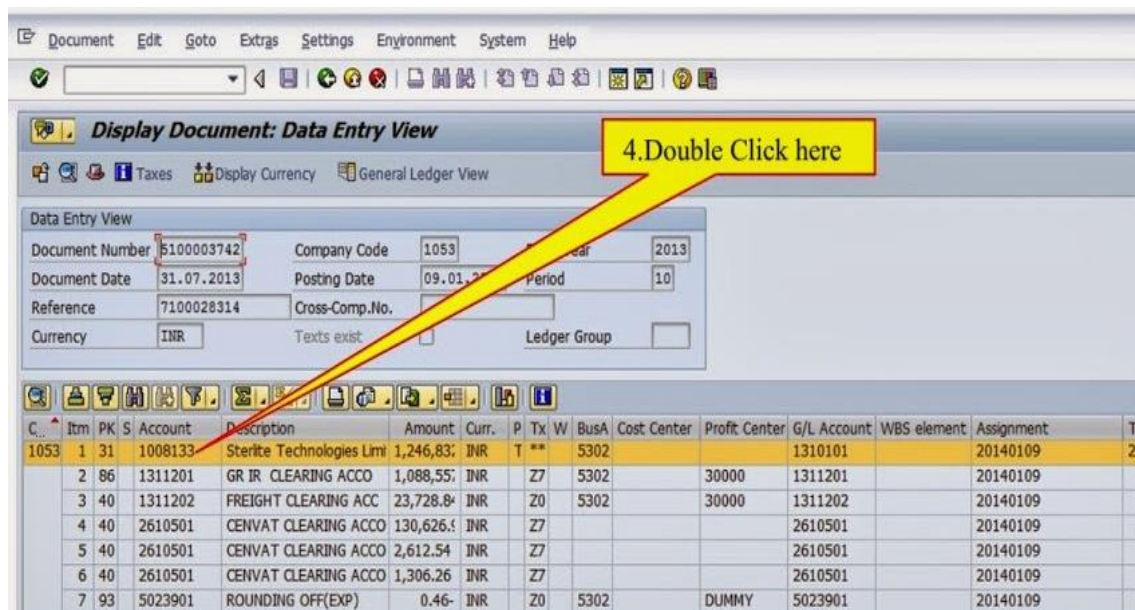
Fig. 6.48: To View PO History

The document is displayed as below:

Check the "Clearing" field. If the field is filled, it indicates that payment has been made. In this case, an amount of Rs 1246832 has been paid to the vendor.
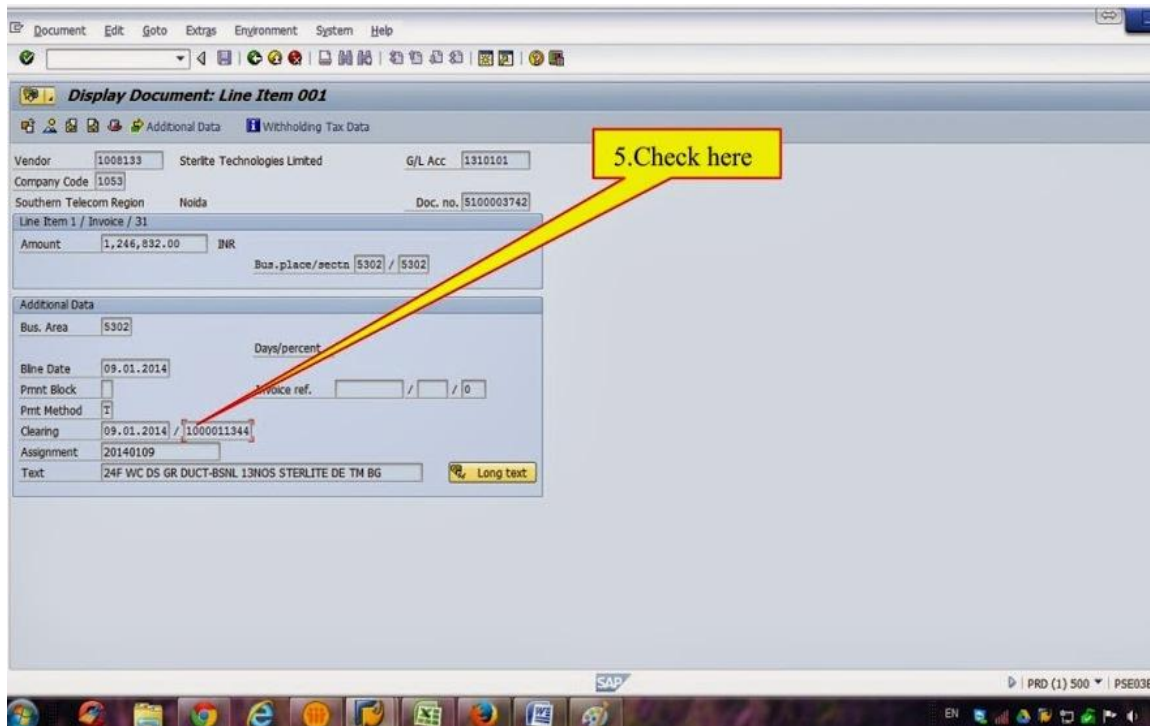
Fig. 6.49: To View PO History

Click the Clearing Document number for payment details.

6.10 Analysis of Purchase Orders

PO analysis can be made using reports for the following:

■ A range of material numbers
■ Purchasing group
■ Requirement tracking number
■ Material group
■ Account assignment
■ Listing of purchase orders for a given account assignment (for example, by cost center).
■ Order value analysis
■ ABC analysis of purchase orders, according to our criteria.
■ PO number
■ Listing of all purchase orders within a range of numbers.
■ Archived purchasing documents
■ Listing of POs that have been removed from the system and archived.
■ Requirement tracking number- Listing of all purchasing documents created with reference to a range of purchase requisitions having a certain requirement tracking number. The analysis shows the requisitions for which purchase orders have already been created.
■ Vendor/material
■ Listing of purchase orders created for a particular vendor, material, or material group.

The following analysis can be made on PO Values:

- ■Totals analysis
- ■ABC analysis
- ■Analysis using comparison periods
- ■Frequency analysis

6.10.1 Order Values-wise Analysis

T/Code : MC$0

PO Analysis By Value in r/o all Purchase Groups
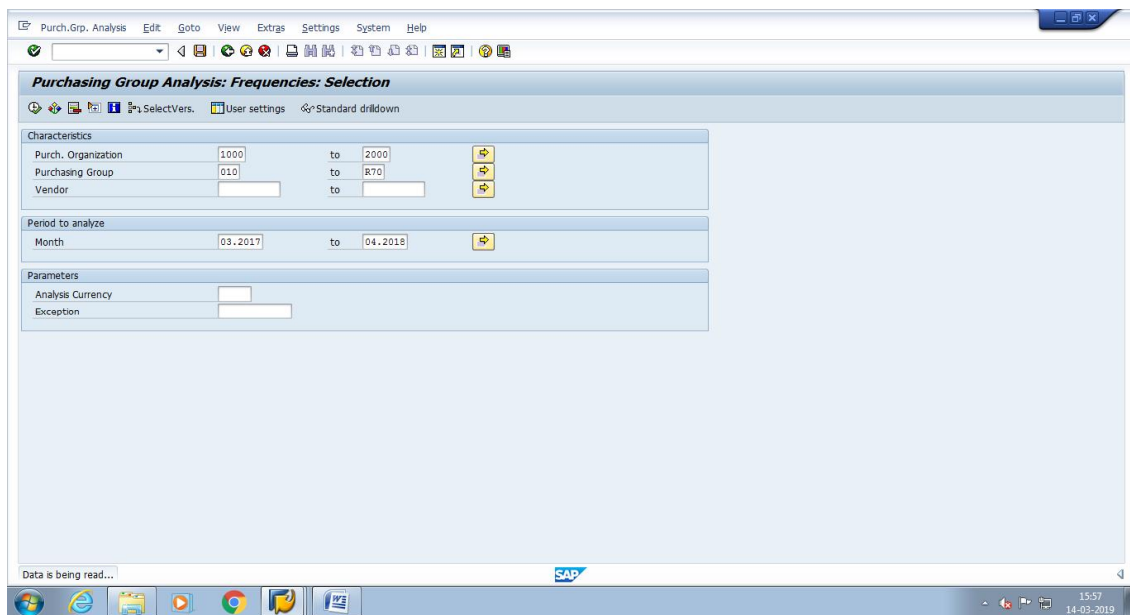
Fig. 6.50: PO Group Analysis

The result will be displayed s below:

Fig. 6.51: PO Group Analysis Display

For Eg, to view the POs placed by 'IT Cell', click the line item. The POs placed by IT Cell are displayed as below:

Screenshot 6.52: Purchasing Group Analysis

6.10.2 Month-wise Analysis

To know the month-wise split up of Corporate Office procurement, go to 'switch drill down' and select 'month'. The vendor-wise purchase value is displayed as below: (The result is sorted in descending order)

6.10.3 Vendor-wise Analysis

Go to 'switch drill down' in the menu and select 'vendor'. Vendor-wise purchase made by Corporate Office is displayed below:

Fig. 6.53: Vendor-wise split up

It shows that bulk of the procurements was made from ZTE telecom (Rs 82 Cr).

Month-wise in r/o ZTE

To view the month-wise POs issued to M/s ZTE, click the line item of ZTE in the above screen and the result is displayed as below:
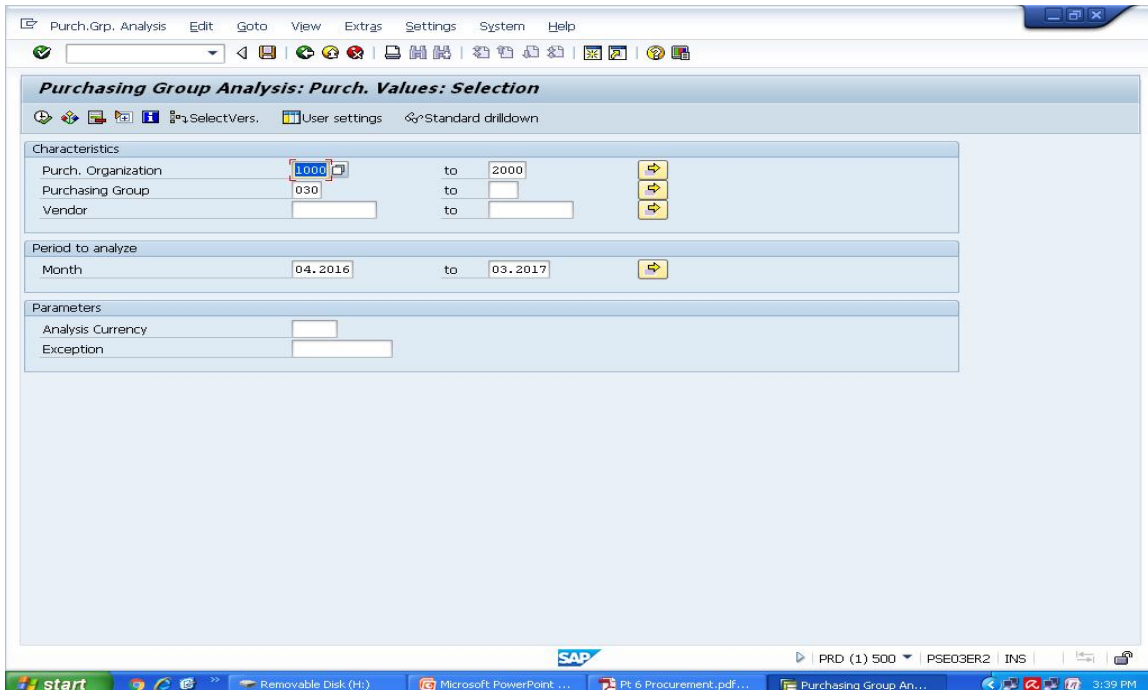
Fig. 6.54: Month-wise split up

It shows that maximum POs were issued in January 2017 (Rs 70.05 Cr).

Note: *The above analysis can be done in respect of other Purchase Groups also by selecting the relevant Purchase Group Code.*

For example, purchase made by Circles can be viewed by selecting Purchase Group 030 as below:

Screenshot 6.55: Purchasing Group Analysis

For details, click the line item

Screenshot 6.56: Purchasing Group Analysis

6.10.4 Purchase Group Analysis By Frequency

T/Code: MC$2

It will display vendor-wise number of RFQs, POs, Contracts, Scheduled Agreements and Deliveries.

Screenshot 6.57: Purchasing Group Analysis

The Vendor-wise details are displayed as below:
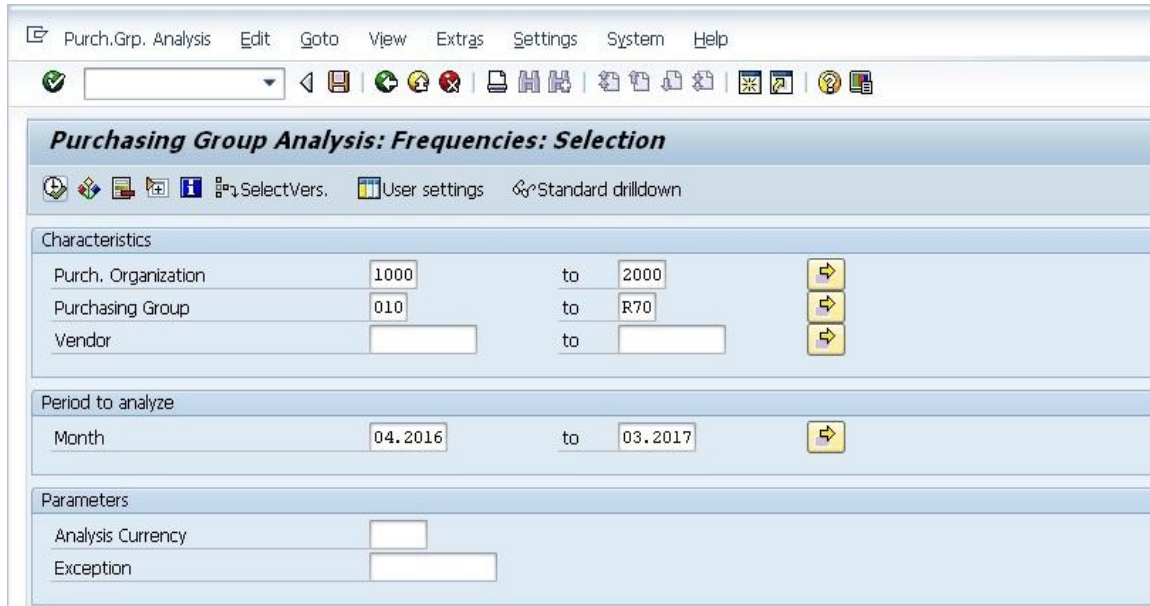
Vendor	RFQs	POs	Contracts	SchedAgrmt	Deliveries
Total	0	65	4	0	128
ZTE TELECOM INDIA	0	7	1	0	37
West Coast Optilin	0	1	0	0	10
Vijender Jain	0	1	0	0	1
VIBHAKAR MISHRA	0	3	0	0	3
TRS LAW OFFICES	0	2	0	0	3
TELECOMMUNICATIONS	0	1	0	0	11
TEK COMPONENTS PVT	0	1	0	0	8
Sterlite Technolog	0	1	0	0	1
Sondhi Narula Dala	0	1	0	0	1
SINHA AND ASSOCIAT	0	1	0	0	1
SHYAM TELECOM LIMI	0	1	0	0	0
SANDHYA KOHLI	0	1	0	0	1
SAI BABA BUSINESS	0	1	0	0	1
S.KUMAR CREATION P	0	0	1	0	0
RANDHIR BERI	0	1	0	0	1
RAJIV TYAGI AND AS	0	4	0	0	3
PARVINDER KUMAR	0	0	0	0	0
NIRANJAN SINGH	0	1	0	0	1
MEGA TRADE CENTRE	0	1	0	0	0
MAHESH MOTORS	0	1	0	0	0
LOTUS LAW PARTNERS	0	1	0	0	1
L.B. RAI	0	5	0	0	5
K KUMAR	0	4	0	0	3
K & COMPANY	0	13	0	0	13
JUSTICE AJIT PRAKA	0	1	0	0	1
JAG MOHAN MISRA	0	1	0	0	1

Screenshot 6.59: Vendor-wise details

6.10.5 Analysis By Purchase Group

A Purchase Group is the key for a buyer or group of buyers responsible for certain category of procurement activities. Purchase Groups will be defined at a combination of departments (Telecom, Civil, Electrical, Marketing, Administration and Finance) and locations (Corporate, Factories, Circles, SSAs, Projects, Telecom Regions and Training Centres)
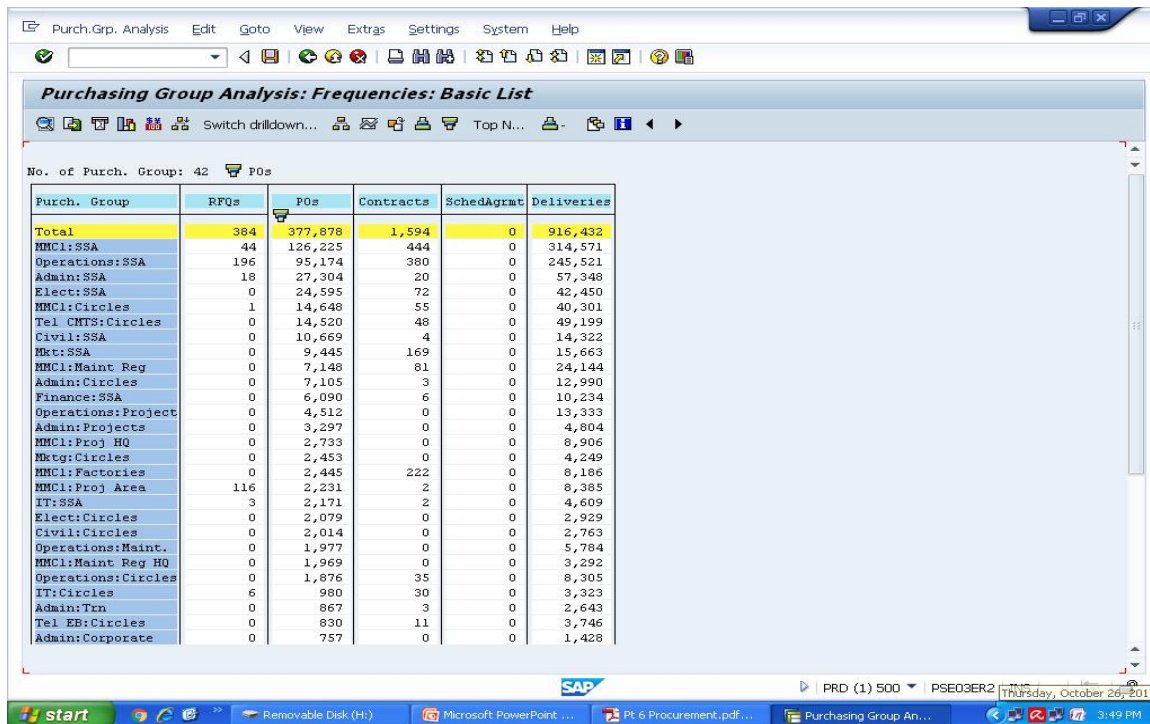
Screenshot 6.61: Purchasing Group Analysis

Purchase Group-wise details are displayed as below:

No. of Purch. Group: 42   POs

Purch. Group	RFQs	POs	Contracts	SchedAgrmt	Deliveries
Total	384	377,878	1,594	0	916,432
MMC1:SSA	44	126,225	444	0	314,571
Operations:SSA	196	95,174	380	0	245,521
Admin:SSA	18	27,304	20	0	57,348
Elect:SSA	0	24,595	72	0	42,450
MMC1:Circles	1	14,648	55	0	40,301
Tel CMTS:Circles	0	14,520	48	0	49,199
Civil:SSA	0	10,669	4	0	14,322
Mkt:SSA	0	9,445	169	0	15,663
MMC1:Maint Reg	0	7,148	81	0	24,144
Admin:Circles	0	7,105	3	0	12,990
Finance:SSA	0	6,090	6	0	10,234
Operations:Project	0	4,512	0	0	13,333
Admin:Projects	0	3,297	0	0	4,804
MMC1:Proj HQ	0	2,733	0	0	8,906
Mktg:Circles	0	2,453	0	0	4,249
MMC1:Factories	0	2,445	222	0	8,186
MMC1:Proj Area	116	2,231	2	0	8,385
IT:SSA	3	2,171	2	0	4,609
Elect:Circles	0	2,079	0	0	2,929
Civil:Circles	0	2,014	0	0	2,763
Operations:Maint.	0	1,977	0	0	5,784
MMC1:Maint Reg HQ	0	1,969	0	0	3,292
Operations:Circles	0	1,876	35	0	8,305
IT:Circles	6	980	30	0	3,323
Admin:Trn	0	867	3	0	2,643
Tel EB:Circles	0	830	11	0	3,746
Admin:Corporate	0	757	0	0	1,428

Screenshot 6.62: Purchasing Group analysis

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6.10.6 ABC Analysis

The ABC Analysis is used for classifying vendors or materials by order value.

A	:	Percentage with a high order value.
B	:	Percentage with a medium order value.
C	:	Percentage with a low order value.

The ABC analysis allows us to determine the relative importance of the individual vendors in the vendor base. It provides us with an overview of any changes that may occur in the relationships with vendors. Go to 'Edit' in the top menu and select 'BC Analysis'.
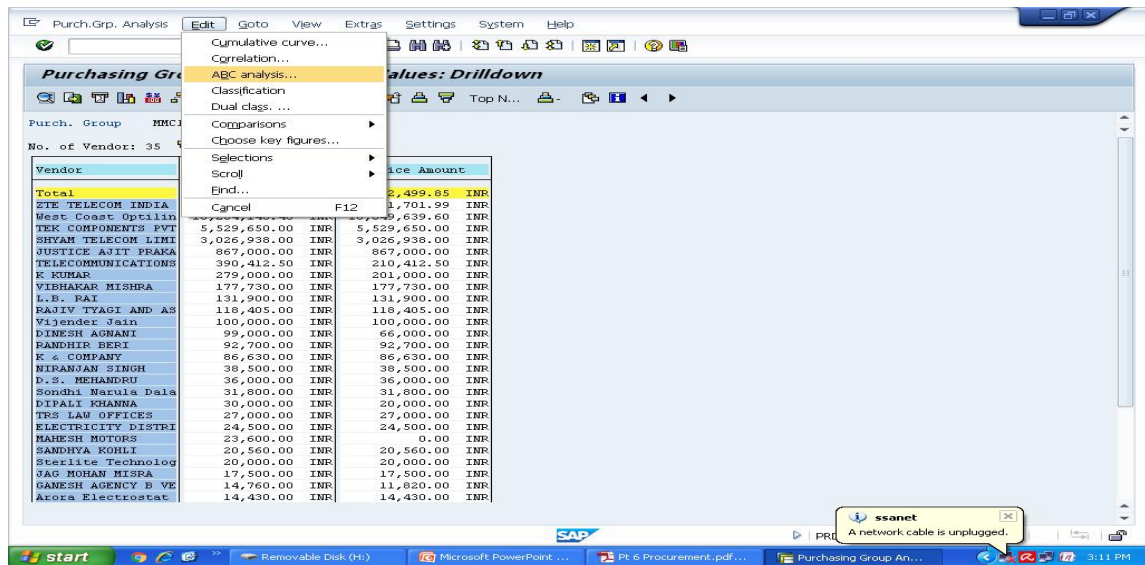
Fig. 6.63: ABC Analysisabc

Enter A, B, C values as below:
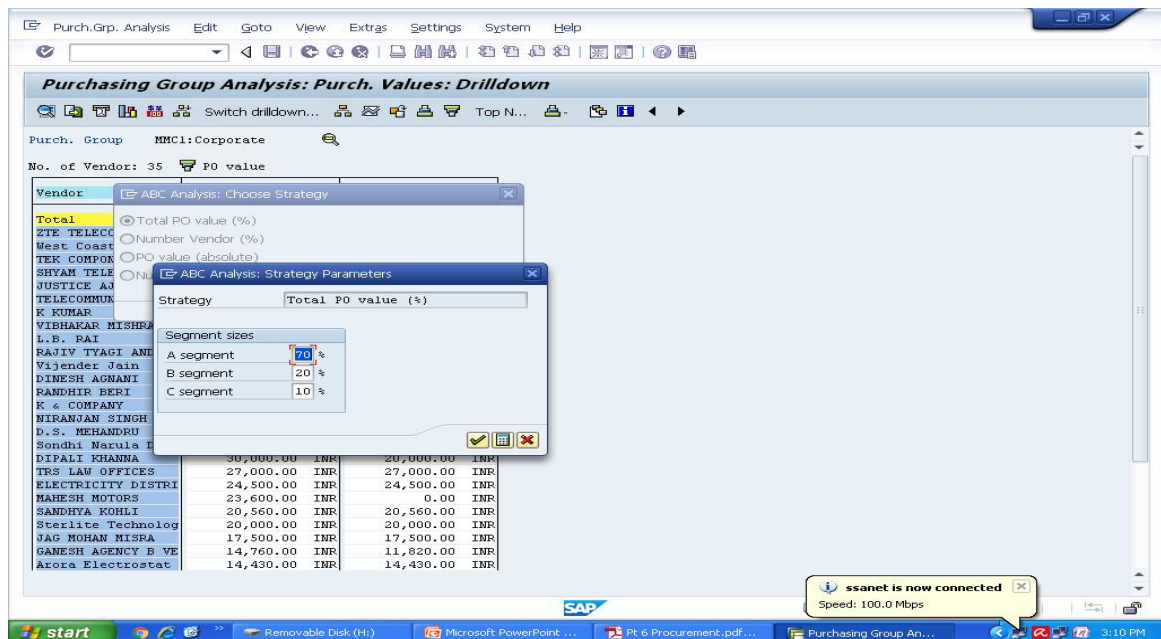
Screenshot 6.64: ABC Analysis

ABC Analysis Result
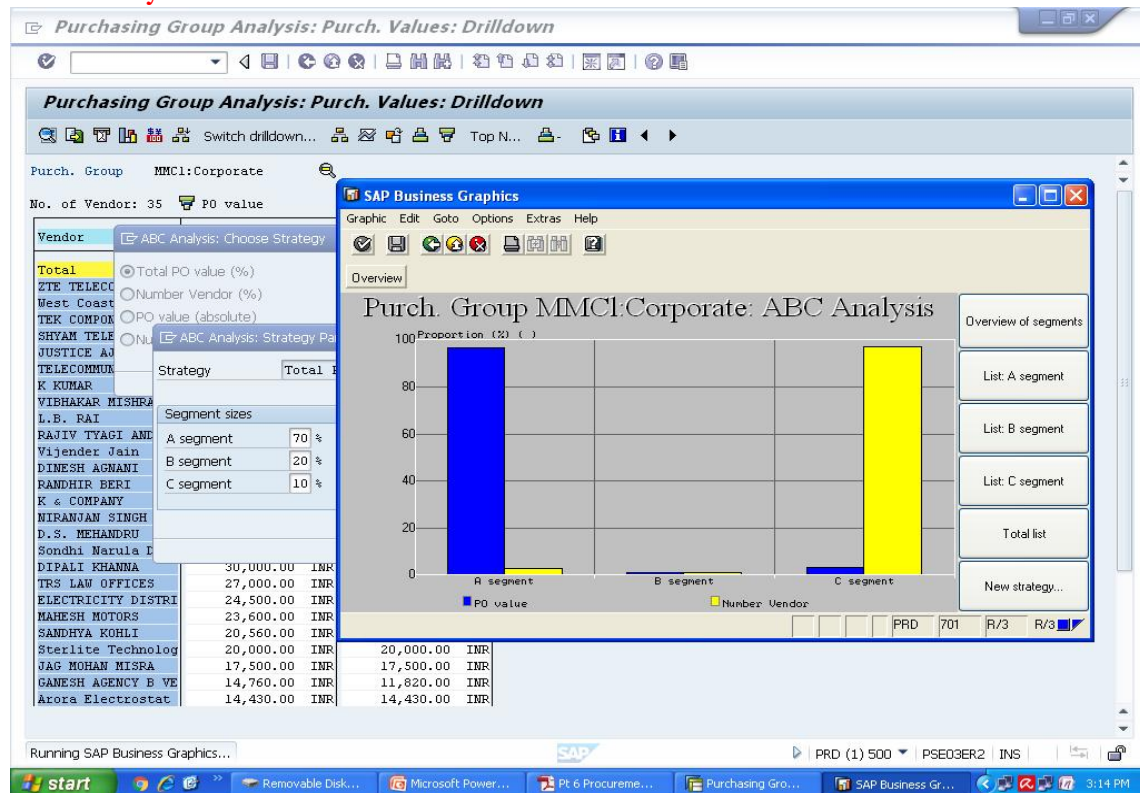
Screenshot 6.65: ABC Analysis

ABC Analysis List

Screenshot 6.66: ABC Analysis

ABC Analysis- Overview of Segments
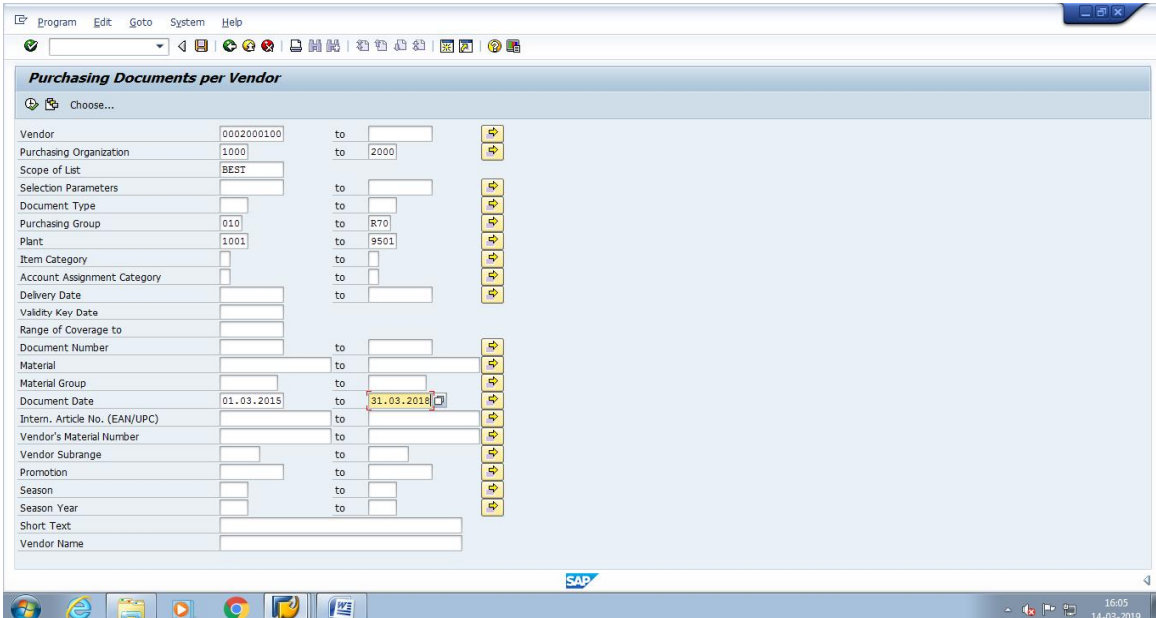
Screenshot 6.67: ABC Analysis

Unused POs: Since POs remaining open for an unreasonable period pose fraud risks, such cases are to be critically examined.

6.10.7 Vendor-wise details of POs

T/Code: ME2L

Details can be viewed for a particular vendor or for a range of vendors. (There are other variants also.) For Eg. To view the POs placed by M/s ZTE (Vendor Code 002000100) by all Purchase Groups.

Screenshot 6.68: Purchasing Doc By Vendor

POs placed on ZTE are displayed as beow. To view PO No 4200034128, click the PO number.

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Screenshot 6.69: Purchasing Doc By Vendor

The PO is displayed as below. It gives the PO No, material, order quantity, material price, delivery pending, Invoice pending etc.

Screenshot 6.70: Purchasing Doc By Vendor

Similarly PO details can be extracted for vendor, material, project, material group, Tracking No, PO No, supplying plant, service etc.

6.10.8 Display Vendor details

T/Code: XK06
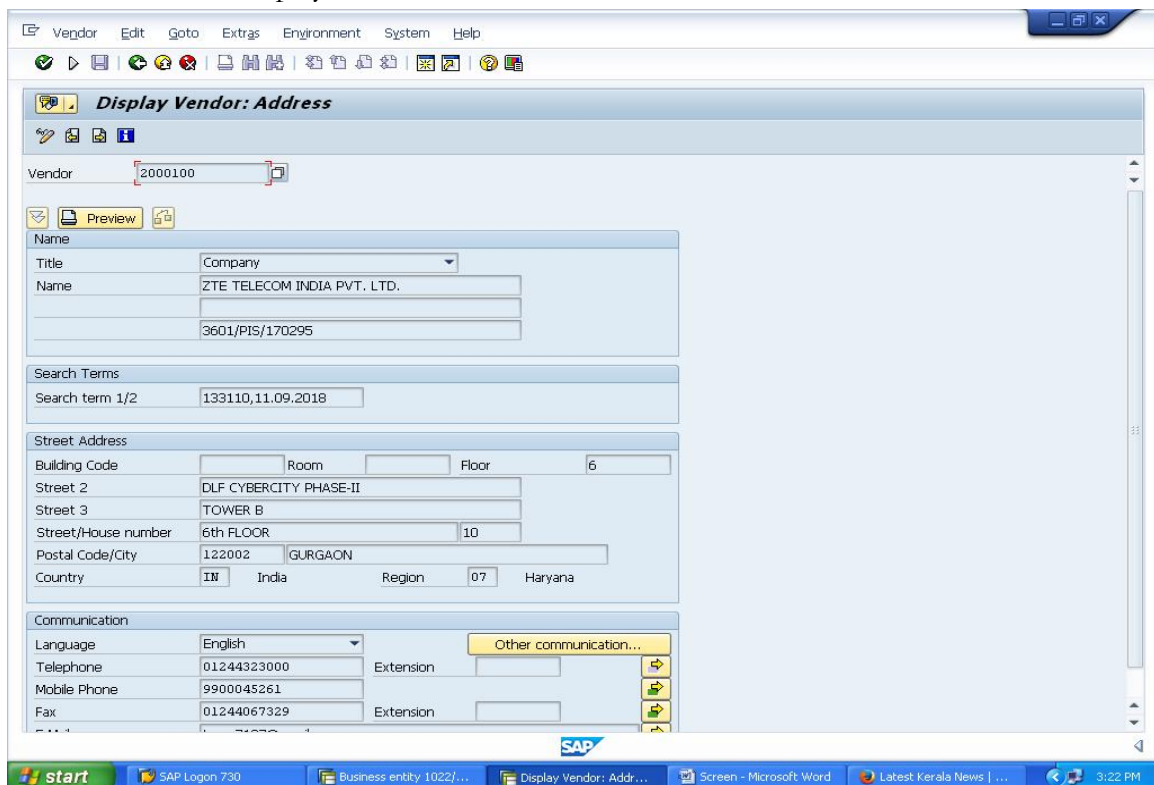
Screenshot 6.71: Display Vendor

Vendor details are displayed as below:

Screenshot 6.72: Display Vendor

6.10.9 Vendor: Age-wise Analysis

T/Code: ZFI106_V will give the Open Items as on a particular date.

Eg. To view the age-wise analysis in r/o ZTE (Vendor Code 2000100)

Screenshot 6.73: Age-wise Analysis

Open Items are displayed as below:

Screenshot 6.74: Open Items

Click the line item for vendor line item display

Screenshot 6.75: Vendor Line Item Display

6.10.10 Vendor Balances and Special GL Transaction with Vendors

T/Code: FBL1N

Vendor Outstanding or Paid Invoices as well as Special GL Transaction with Vendors like EMD/SD received from Vendors, Noted items of Vendors etc can be seen through this Tcode.

Screenshot 6.76: Vendor Line Item Display

Vendor Line items are displayed as below:

Screenshot 6.77: Vendor Line Items

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6.10.11 Vendor Balance Report

This report will give the vendor-wise OB, debit for the month, cumulative debit, credit for the month, cumulative credit and net balance.

Screenshot 6.78: Vendor balance

Vendor Balance Report is displayed as below:

Screenshot 6.79: Vendor Balance Report

6.10.12 Display PO Values

T/Code: MC$N

Eg: PO values for Purch.organization 2000, Plant 2201 to 2212 for the period 2015-16

Screenshot 6.80: Material Analysis

Material Analysis is displayed as below:

Screenshot 6.81: Material Analysis

To view the POs for AMF galvanized, highlight the line item, go to Extras in menu bar and select 'document information' and click 'for material'.

Screenshot 6.82: Material Analysis

The result will display the POs

6.10.13 Purchase Document for a Particular for Material

T/Code : ME2M

We can view the POs placed for a particular material using the above T/Code.

Screenshot 6.83: Purchasing Doc per Doc Number

Purchasing Documents are displayed as below:

Screenshot 6.84: Purchasing Doc

Click the Purch Doc number to view the PO. PO is displayed as below:

Screenshot 6.85: PO Display

6.11 Display 'Contracts'

A contract is a legal document which establishes a long-term agreement with a vendor to supply a material or service.

Transaction Code	ME33K
Menu	Logistics > Materials Management > Purchasing > Outline agreement > Contract > Display

In the "Display Contract: Initial Screen", enter information as specified in the fields in the table below:
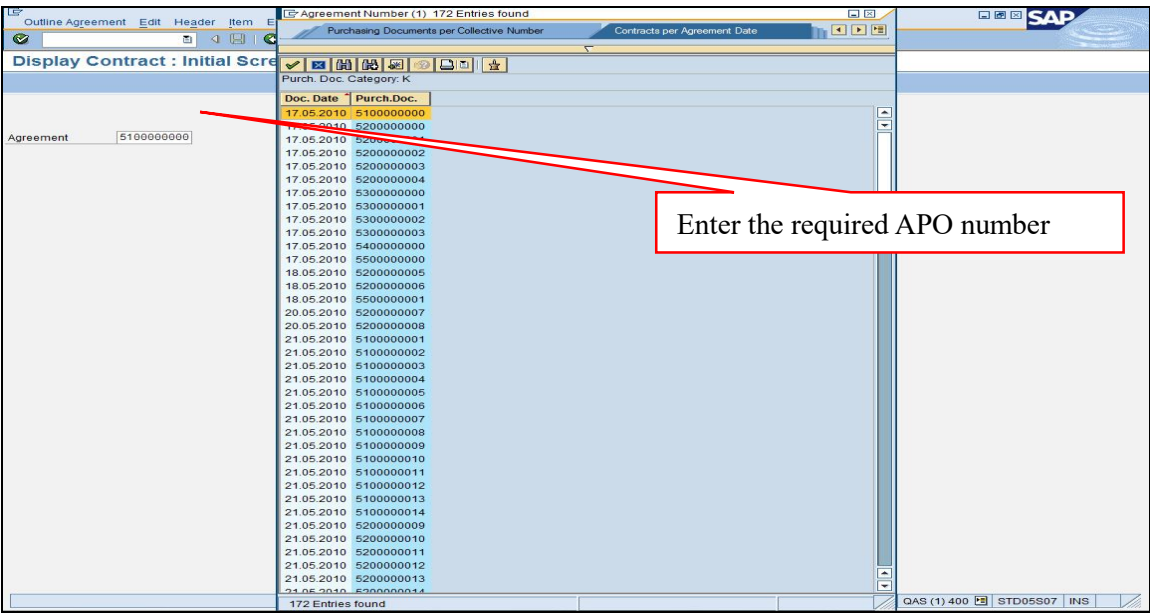
Screenshot 6.86: Contracts

Click on the Enter button. In the Display Contract: Item Overview Screen" the following fields will be displayed.   In a 'Display' format, fields cannot be changed.
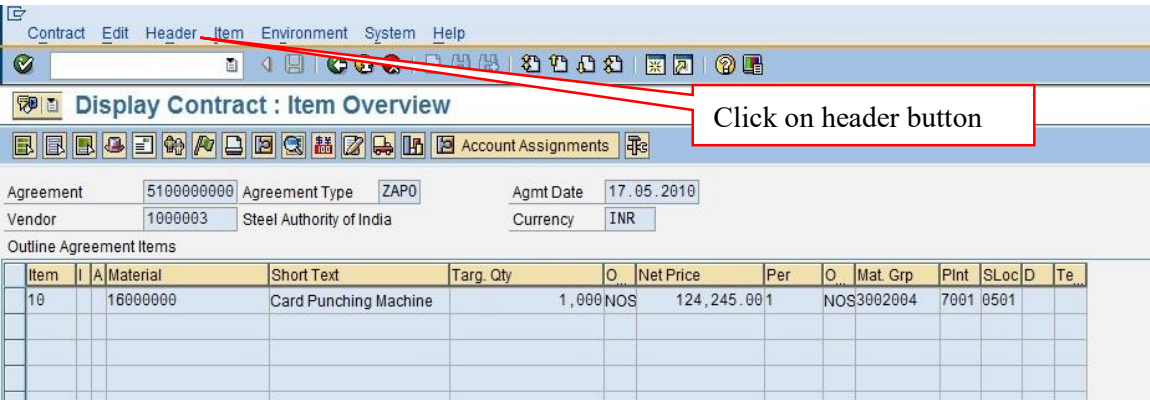
Screenshot 6.87: Contract

Header data is displayed as below:

Screenshot 6.88: Contract Header

Click on the Header button .On the "Display Contract: Header Data" screen, view details. There is an option to use the radio buttons / icons on the menu bar to view more information that pertains to the contract. Select an item and click on the Additional Data button. On screen Display Contract:

Additional data for Item; display information in the fields as specified in the table below:

Screenshot 6.89: Contract Additional Data

6.12 Source List

Source Lists contains list of approved vendors for materials. Source List is created to ensure that procurement is made only from approved vendors.

Transaction Codes **ME06** and **ME0M** can be used to generate Source List"

Note:
This generated no details since the Source List has not been created yet.

6.13 Payment Block Workflow

T/Code: ZFI_PB_STAT

The report will display details of pending approvals in the workflow, payment doc number, date of   payment etc. But access is available only to CGMT, IFA and head of CSC. Re report may be obtained from the CSC.

6.14 GR / IR Clearing Account

GR/IR (Goods Received/Invoice Received) Clearing account is an intermediary clearing account for goods and invoices in transit. It represents:

> -goods received but invoice not received
> -invoice received but goods not received.

When goods are received the GR/IR account is credited through MIGO and when invoice is received, the GR/IR account is debited through MIRO function.

The GR/IR account may also contain discrepancies between the invoice and the GR that have not been resolved.

When goods are received Inventory a/c is debited with corresponding credit to GR/IR account. When the invoice is received GR/IR account is debited and the Vendor account is credited. The balances in GR/IR account will go in to the balance sheet as an asset or a liability. If the account has a debit balance, it means goods have been invoiced but not received. If the account has a credit balance, it means goods have been received but not invoiced. Balance in GR/IR clearing account can also result due to quantity differences between goods received and invoice raised by the vendor. Such balances can be set off only on receipt of balance quantity or receipt of further invoice as the case may be. The credit given to GR/IR account, when goods are received is set-off with the debit given when invoice is received. Hence GR/IR account acts only as a buffer.

If no more goods or invoices are to be received, the balance is corrected manually (i) after return of excess goods (ii) cancelling the invoice and posting a revised invoice, or (iii) posting a credit memo for the surplus posted quantity.

- GR/IR (Goods Received/Invoice Received) Clearing account is an intermediary clearing account for goods and invoices in transit. It represents:
  > -goods received but invoice not received
  > -invoice received but goods not received.
- When goods are received Inventory a/c is debited with corresponding credit to GR/IT account. When the invoice is received GR/IR account is debited and the Vendor account is credited.

- The credit given when goods are received is set off with the debit given when goods are invoiced and balance becomes zero.
- Debit balance means goods have been invoiced but not received
- Credit balance means goods have been received but not invoiced
- Debit/credit balance may also due to difference in qty received and qty invoiced.

> **Audit of GR/IR Clearing Account is necessary to ensure:**
> (i)   the correctness of balance under GR/IR account and individual debits and credits
> (ii) clearance of balance at the end of the reporting period in r/o POs for which no supply pending
> (iii) Debits/credits are not kept pending for long, but periodically reviewed and settled.

6.14.1 Display GR/IR Account Balance

Drill down the **G/L account 1311201** from the Trial Balance to the transaction level. Download the same in to Excel and sort the debits and credits. Find out items which are not cleared and reason for not clearing. Obtain the balance amount in Goods received but not invoiced clearing account.

If goods and services were posted directly to accounts when received, it would be difficult to accrue for items received but not yet invoiced and to manually check that the quantity received matched the final invoice. Therefore, an interim or intermediate account is used in SAP called the GR/IR account (goods received versus invoices received).

By subtotaling the GR/IR account by PO line items in the Assignment field, you can group related transactions together and see what amounts are still outstanding. You can see by the document type whether the missing item is on the invoice side or the GR side.
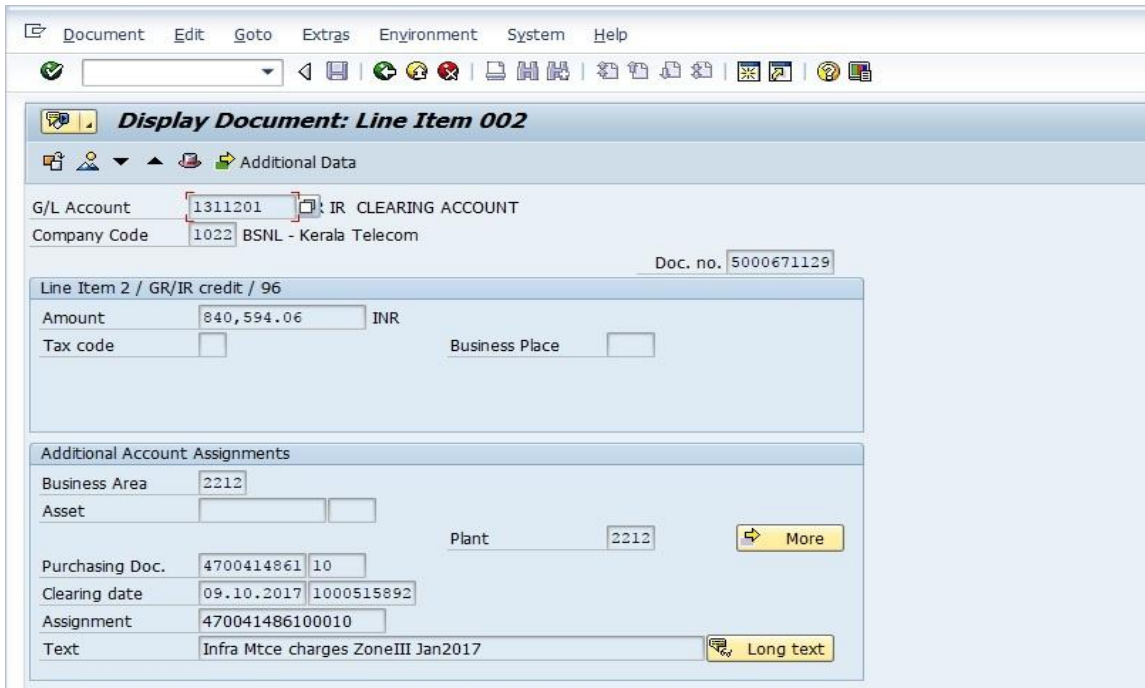
GL Account Line Item display for GL Code 1311201 is displayed as below:

Screenshot 6.90: Contracts

🔴 Indicates cleared items and 🟩 indicates open items.

Drill Down Line item: To view the line item details, select the item and click the Display Document Button. Eg. Click line item for Document 5000671129. The document is displayed as below:

Screenshot 6.91: Display Doc

The Document gives the PO Doc number, clearing date and Assignment etc. To view the PO, use **T/Code ME23N** (Ref 6.9.21) or go the 'Environment' in the top menu and click purchasing doc.

6.15 Material Display

T/Code: MM03

Screenshot 6.92: Material Display

Material Doc list for all the Circles is displayed as below:

Screenshot 6.93: Material Doc List

6.15.1 Material- Display Changes

T/Code MM04

Eg. To display changes in material No 12003805

Screenshot 6.94: Display Changes- Initial Screen

Changes are displayed as below:

Screenshot 6.95: Display Changes

6.16 Some Useful T/Codes for Procurement-Supply Chain

T/Code	Function	T/Code	Function
FBL1	Display Vendor Line Items	**ME2L**	Purchasing Orders by Vendors
FBL5	Display Customer Line Items, Customer balance	**ME2M**	Purchase Orders by Material
FCH2	Display Payment Document Checks	**ME3C**	APO Reports
FK10	Vendor Account Balance	**ME53N**	PR Display
KO03	Display Internal Order	**ME5A**	Purchase Requisition List
KSB1	Cost Line Items for CoCe	**MK03**	Display vendor (Purchasing)
MB51, ZMDL	List of Materials documents	**MMBE**	Stock Overview
MB52	Materials on Hand Report	**VA03**	Sales Orders
MB5B	Stock for posting date	**VA05**	List of Sales Orders
MB5T	Stock In Transit	**VD03**	Display Customer (Sales)

MC.9	Consolidated stock with value report-	**VF03**	Display Billing Document
MCBA	Consolidated goods movement report	**VF05**	List of Billing Documents
MCE7	Total consolidated material purchase status-	**VL03**	Display Delivery
ME23	Display Purchase Order	**XK03**	Display vendor (centrally)
ME2C	Purchasing orders by the Material Group	**ZMMINV**	Inventory Report
ME2L	Purchase Orders by Vendor	**ZMPI, MI24**	Physical inventory status report
ME2N	Purchase Orders by PO Number	**ZMSTK**	Material Stock Balance Report

PART 7: INVENTORY

7.1: Inventory Audit

The objectives of inventory audit include:
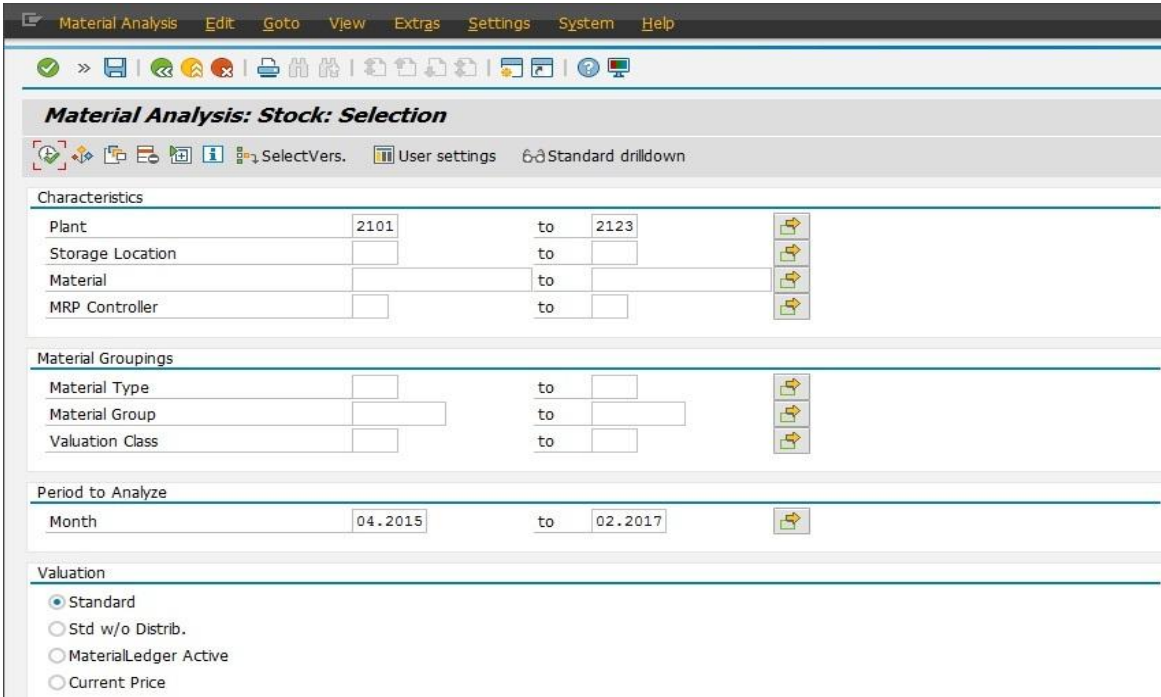
- Whether the Company maintains sufficient stock levels of various materials to meet its requirements?
- Whether there is any idling of stores due to excess procurement, unnecessary procurement etc
- Whether pricing of inventory is done as per the accounting policy.

SAP offers 100% visibility of Inventory for the auditors. Auditors can view the Stock balance, stock receipt, stock issue, stock overview, material document, material group-wise stock, Circle-wise stock, Business Area-wise stock, store location-wise stock, Non/slow moving stores, idling of stores, ABC Analysis etc.

7.2 Display Material Stock

T/Code: MC.9

In the selection screen, give the Plant (Eg 2101 to 2123 –all plants in Karnataka Circle) and period (04/2015 to 02/2017) and execute.

Screenshot: 7.1 Material Analysis

The stock balance is dsplayed as below:

Material Analysis: Stock: Basic List
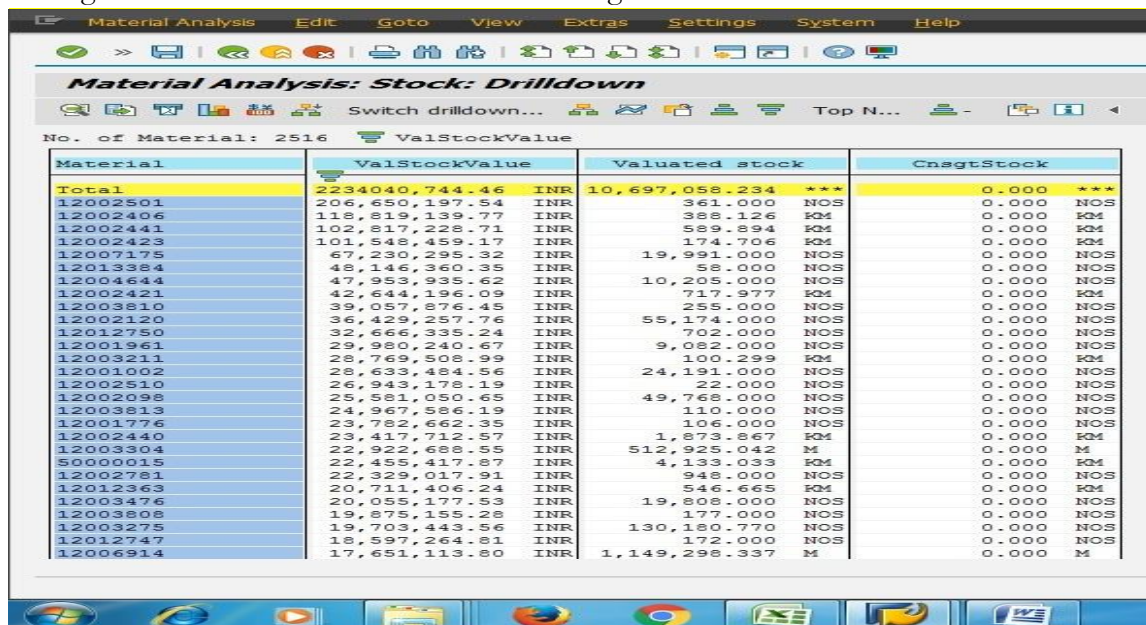
No. of Material: 2516

Material	ValStockValue		Valuated stock		CnsgtStock	
Total	2234065,350.47	INR	10,697,103.334	***	0.000	***
10000146	23,639.78	INR	4,540.000	NOS	0.000	NOS
10000166	85,080.00	INR	5.000	NOS	0.000	NOS
10000324	26,768.00	INR	7.000	NOS	0.000	NOS
10000333	0.00	INR	0.000	NOS	0.000	NOS
10000346	1,081.12	INR	464.000	NOS	0.000	NOS
10000347	35,164.25	INR	12,787.000	NOS	0.000	NOS
10000348	1,241.00	INR	850.000	NOS	0.000	NOS
10000357	7,365.60	INR	1,080.000	NOS	0.000	NOS
10000366	2,163.25	INR	425.000	NOS	0.000	NOS
10000370	4,057.35	INR	645.000	NOS	0.000	NOS
10000372	449.24	INR	354.000	NOS	0.000	NOS
10000375	1,281.82	INR	162.000	NOS	0.000	NOS
10000377	2,055.37	INR	375.000	NOS	0.000	NOS
10000384	1,192.31	INR	456.000	NOS	0.000	NOS
10000387	4,907.70	INR	57.000	NOS	0.000	NOS
10000401	23,306.25	INR	625.000	NOS	0.000	NOS
10000403	72,292.50	INR	918.000	NOS	0.000	NOS
10000405	1,318.75	INR	250.000	NOS	0.000	NOS
10000406	138.23	INR	41.000	NOS	0.000	NOS
10000409	35,640.06	INR	219.000	NOS	0.000	NOS
10000412	9,639.00	INR	204.000	NOS	0.000	NOS
10000413	22.60	INR	10.000	NOS	0.000	NOS
10000417	1,421.00	INR	725.000	NOS	0.000	NOS
10000418	1,025.00	INR	100.000	NOS	0.000	NOS
10000422	567.42	INR	193.000	NOS	0.000	NOS
10000423	1,386.00	INR	275.000	NOS	0.000	NOS
10000427	2,492.63	INR	425.000	NOS	0.000	NOS
10000458	0.00	INR	0.000	NOS	0.000	NOS

Screenshot: 7.2 Material Analysis Display

The material-wise stock is displayed. It shows that the Circle has a stock of Inventory valuing Rs 223.41 Cr.

We can identify the material having maximum stock value and minimum stock value by sorting the column 'ValStockValue' in descending order.

Material Analysis: Stock: Drilldown

No. of Material: 2516   ValStockValue

Material	ValStockValue		Valuated stock		CnsgtStock	
Total	2234040,744.46	INR	10,697,058.234	***	0.000	***
12002501	206,650,197.54	INR	361.000	NOS	0.000	NOS
12002406	118,819,139.77	INR	388.126	KM	0.000	KM
12002441	102,817,228.71	INR	589.894	KM	0.000	KM
12002423	101,548,459.17	INR	174.706	KM	0.000	KM
12007175	67,230,295.32	INR	19,991.000	NOS	0.000	NOS
12013384	48,146,360.35	INR	58.000	NOS	0.000	NOS
12004644	47,953,935.62	INR	10,205.000	NOS	0.000	NOS
12002421	42,644,196.09	INR	717.977	KM	0.000	KM
12003810	39,057,876.45	INR	255.000	NOS	0.000	NOS
12002120	36,429,257.76	INR	55,174.000	NOS	0.000	NOS
12012750	32,666,335.24	INR	702.000	NOS	0.000	NOS
12001961	29,960,240.67	INR	9,082.000	NOS	0.000	NOS
12003211	28,769,508.99	INR	100.299	KM	0.000	KM
12001002	28,633,484.56	INR	24,191.000	NOS	0.000	NOS
12002510	26,943,178.19	INR	22.000	NOS	0.000	NOS
12002098	25,581,050.65	INR	49,768.000	NOS	0.000	NOS
12003813	24,967,586.19	INR	110.000	NOS	0.000	NOS
12001776	23,782,662.35	INR	106.000	NOS	0.000	NOS
12002440	23,417,712.57	INR	1,873.867	KM	0.000	KM
12003304	22,922,688.55	INR	512,925.042	M	0.000	M
50000015	22,455,417.87	INR	4,133.033	KM	0.000	KM
12002781	22,329,017.91	INR	948.000	NOS	0.000	NOS
12012363	20,711,406.24	INR	546.665	KM	0.000	KM
12003476	20,055,177.53	INR	19,808.000	NOS	0.000	NOS
12003808	19,875,155.28	INR	177.000	NOS	0.000	NOS
12003275	19,703,443.56	INR	130,180.770	NOS	0.000	NOS
12012747	18,597,264.81	INR	172.000	NOS	0.000	NOS
12006914	17,651,113.80	INR	1,149,298.337	M	0.000	M

Screenshot: 7.3 Material Analysis Sorted

7.2.1 Display Business Area-wise stock

Click the "Switch Drilldown' in the menu bar on the top and select 'Business Area'.

Screenshot: 7.7 Material Analysis- Basic List

The BA-wise stock is displayed as below:

Screenshot: 7.8 Material Analysis-BA wise

It shows that maximum stock is in BA 2123 (Rs 56.81 Cr) followed by BA 2121 and BA 2102.

To view Location-wise stock availability, click the "Switch Drilldown' in the menu bar on the top and select 'Storage Location'. The storage location-wise stock is displayed as below:

Screenshot: 7.9 Material Analysis- Store Location-wise

Storage location is an 8 digit code. The first 4 digits represent the plant (Business Area) and next 4 digits, the location. 1000 is the main store in the SSA.

To view month-wise stock of materials, click the "Switch Drilldown' in the menu bar on the top and select 'month. The month-wise stock is displayed as below

Screenshot: 7.10 Material Analysis- Month-wise

7.2.2 Material Stock- Material Group-wise

T/Code: MC.9 (To view the Material Group-wise stock; select the group code in the input screen). The Material Group-wise stock is displayed as below:

Screenshot: 7.11 Material Group-wise Stock

7.2.3 Material Stock- Material Type-wise

T/Code: MC.9 (To view the Material Type-wise stock; select the type code in the input screen). The Material Type-wise stock is displayed as below:

Screenshot: 7.12 Material Type-wise Stock

7.2.4 Material Stock Analysis- Storage Location-wise

T/Code: MC.5   (Plant 2101 to 2123)

Screenshot: 7.13 Material Stock Analysis- Storage Location-wise

The storage location-wise stock report is displayed as below:

Screenshot: 7.14 Material Stock Analysis- Storage Location-wise Display

7.2.5 Stock Value Report Duly Reconciled with GL balance

T/Code: ZFI_MM_Posting/ZFI_MM_Recon

The reconciliation report between GL and MM balance will show profit center-wise as well as plant-wise balance. Since auditors have no privilege to run the above T/Code, the report may be obtained from the Accounts Officer (CA).

7.2.6 Receipt and Issue of Materials

T/Code: MC.A

For example, to view the receipt and issue of materials in Karnataka Circle, specify the Plant from 2101 to 2123 and specify the period also. Press F8 or the Execute icon.

Screenshot: 7.14 Material Analysis- Reciepts/Issue

The result is dislayed as below:

Screenshot: 7.15 Material Analysis- Receipt/Issue List

7.2.7 Plant Stock

T/Code: MC.1

We can view the plant-wise stock value using the above T/Code.

Eg.Bangaluru BA. Click the line item.

Screenshot: 7.16 Plant Stock List

To view the Store location-wise stock details of Bangaluru SSA, double click the line item. The location-wise stock details are displayed as below:

Screenshot: 7.17 Plant Analyis Stock Drilldown

To view the material-wise details in a Store Location, double click the Line Item. Eg. Main Store.

The **material-wise stock** in Main Store of Bangaluru SSA is displayed below:

Screenshot: 7.18 Plant Analysis-Drilldown

To view the **month-wise stock details** of a paticular material, double click the line item. Eg. ONT W/O BTY BACKUP-C.

Screenshot: 7.19 Plant Analysis-Month-wise

Plant Stock Availability of Material can be viewed using another T/Code MB53

Give the range of plants (Kerala 2201-2212)

Screenshot: 7.27 Plant Analysis

Plant-wise stock is displayed as below:

Screenshot: 7.28 Plant Analysis Display

7.3 ABC Analysis

The ABC Analysis is used for classifying inventory based on its value.

A : Percentage with a high value.
B : Percentage with a medium value.
C : Percentage with a low value.

The ABC analysis allows us to determine the relative importance of the different types of inventory.

T/Code: MC40 (Analysis based on value)

Screenshot: 7.20 ABC Analysis

ABC Analysis is displayed as below:

Screenshot: 7.21 ABC Analysis Display

7.4 Stock Overview

Transaction Code: **MMBE**

Screenshot: 7.22 Stock Overview

Stock overview is displayed as below:

Screenshot: 7.23 Stock Overview Display

7.5 Stock Requirement List

Stock Requirement List is a dynamic list, which shows the current status of requirements & sources for that material. Any changes in the procurements or needs will be shown in this list.

Click the Stock Requiremen list in the above screen. The list is displayed as below:

Screenshot: 7.24 Stock Requirement List

7.6 Material Movement

Go to 'Environment' in the SAP to p menu bar and click 'Material Movement'.

Screenshot: 7.25 Material Movement

Material Movement is displayed as below:

Screenshot: 7.26 Material Movement Display

7.7 Material Document List

Material document list is used to generate any goods movement such as goods receipt, goods issue for a production order, etc.

T/Code: Mb51

Screenshot: 7.29 Material Document List

Material Dociument List is displayed as below:

Screenshot: 7.30 Material Analysis Display

To view the document No 5001027715, click the line item in the above screen. Document is displayed as below:

Screenshot: 7.31 Material Document

7.8 Accounting Document for Materials

T/Code: MR51

Screenshot: 7.32 Accounting Document

Accounting Document Display

Screenshot: 7.33 Accounting Documents Display

To view any document, click the line item.

7.9 Display Open Items

T/Code: FBL1N

Screenshot: 7.34 Vendor Line Item

Open Items are displayed as below:

Screenshot: 7.35 Vendor Ope Items

🔴 Indicates open items. To view the document, click the document number.

7.10 View Vendor Balance

Go to Environment, click 'Display Balances' as shown below:

Screenshot: 7.36 Vendor Balance Display

Vendor Balance is displayed as below:

Screenshot: 7.37 Vendor balance Display

7.11 GR/IR balance from TB GL Code 1311201

(Refer Item 6.18 for details on GR/IR Account)
Open the TB (T/Code GR55, Report Group Z001)

Screenshot: 7.38 TB

TB is displayed as below:

Screenshot: 7.39 TB Display

Click the Account No 1311201 for **monthly debit/credit** details as below:

Screenshot: 7.40 GL Acc Balance Display

Click the line item total for monthly credits and debits

Screenshot: 7.41 GR/IR Drilldown

7.12 Inventory Value / Warehouse Stock Report

Transaction Code MB52

Via Menus	(a) Logistics > Material Management > Inventory Management > Environment > Stock > Warehouse Stock
Transaction Code	MB52

Screenshot: 7.42   Warehouse Stock

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Warehouse Stock is displayed as below:

Screenshot: 7.43 Warehouse Stock Display

7.13 GL Code-wise Stock Value

Materials are booked under different GL codes based on the material Group. Stock value of materials can be viewed GL account-wise.

T/Code: MB5L: Input the material code, Company Code and other selection criteria. The GL Code-wise stock value is displayed as below:

Screenshot: 7.45: GL Code-wise Stock

PART 8: OTHER AREAS

This chapter includes audit checks on pay & allowances, leave, pension & leave salary contribution, advances, income tax, settlement of taxes, telecom revenue, infrastructure sharing, non-PO bills, Vendor Payment Status, Projects etc.

8.1 Human Capital Management (HCM)

The HCM module carries out all functions related to the recruitment, management and administration of personnel, payroll processing and personnel training and travel. The HR module is also used to maintain data related to training and work benefits.

8.1.1. Master Data in HCM

The Master data in HCM Module is stored in **infotypes.** Infotypes are logical groupings of data fields that are entered and saved to the database. Each infotype pertains to a specific type of data. And has a database table associated with it.
Example : For Infotype 0002- Personal Data , Database table: PA0002

There are more than 100 standard Infotypes in SAP
- Eg. IT 0002 - Personal Data (First name, last name, date of birth)
- IT 0003 - Payroll status (last payroll, date of recalculation)
- IT 0006 - Address (Permanent residence, home address, temp address)

The HR module is divided mainly into the following components.
- Personnel Administration
- Personnel Development
- Recruitment
- Organization Management
- Training & event Management
- Time Management
- Payroll Accounting

Structures in Human Resources:
- **(i) Enterprise Structure**: Company code, Personnel Area, and Personnel sub area. A Personnel area is a Personnel Administration-specific unit and is the sub unit of company code. It can represent large divisions within a company and Geographic locations. It is a selection criteria for reporting. e.g.. G007. Personnel sub areas are a subdivision of the personnel area. At this level, the organizational aspects are controlled. e.g.. 0002 –ATD.

(ii) Personnel Structure: **Employee Group, Employee subgroup, Payroll accounting area**. The components in *Personnel structure* are (i) Employee Group (ii) Employee Subgroup and (iii) Payroll Area. Payroll Area is defined for employees with identical payroll period & periodicity.

Employee Group	Employee Sub group	Payroll Accounting Area
The Employee group defines the relationship between an employee and a company. Employee Group is general classification of employees.	Division of employee groups according to the status of employees. Within Each Employee group ,the Employee sub groups are:	The payroll accounting area is an organizational unit defined for the purposes of payroll accounting. All employees who are accounted together are assigned to the same payroll accounting area. The payroll accounting area provides the payroll driver with two pieces of information: the number of employees to be accounted and the dates of the payroll period. Organizational Assignment info type (0001) stores payroll accounting area.
1. **Active** 2. **Retiree** 3. **External** 4. **Trainee** 5. **Temporary**	1. **Group A** 2. **Group B** 3. **Group C** 4. **Group D**	

(iii) Organizational Structure: Org units, Jobs and Positions. Organizational units describe the various business units that exist in BSNL. Multiple organizational units and their inter-relationships from the organizational structure. *Position is the* Employee Placement or individual employee assignment within the company. e.g. Software Engineer or Manager

8. 2 Leave Account

We can view the leave summary and its details for the any particular employee, selected Personal Area, Personal subarea, cadre, Grade or Stream. The correctness of pay & allowances can be verified with the information on different kinds of leave availed by the employees.

Eg. To view the leave summary for Personal Area- 2300 Kerala Circle, Subarea-2313 TVM
T/Code: ZHR

In the next screen, type the personal area code and personal subarea code as shown below:

Screenshot 8.1: Report of Leave Summary

The leave summary in r/o all employees in TVM under Kerala Circle will be displayed as below:

Screenshot 8.2: Display Report of Leave Summary

To view the leave details of Personal Number 3885, Vijayan K, double click the line item.

The leave details are displayed below:

Screenshot 8.3: Individual Report of Leave Summary

8.3 Leave Salary & Pension Contribution

The correctness of Leave Salary & Pension Contribution can be verified during audit using the

T/Code: LSPC- zhrtc_lspc

Screenshot 8.4: LSPC

The details of LS & PC are displayed as below:

Screenshot 8.5 : LSPC Gr Insurance Display

8.4 Income Tax Calculation

Auditors can access the detailed calculation sheet of IT deducted from employees and verify compliance with the provisions of the IT Act.

T/Code : zhr_incometax_excel

Screenshot 8.6 : Income Tax Download

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The IT details will be generated in an Excel sheet as shown below:

Screenshot 8.6 : IT Download to Excel

8.5 Loan Balance

Eg: To view loan balance in r/ all employees under Employee Gr -2 (Absorbed), Subgroup -02 (Gr B). Select the loan type from the match code. We have selected HBA
T/Code: ZHR_LOAN_Bal

Screenshot 8.7 : Loan Broad Sheet

HBA loan balance is displayed as below:

Screenshot 8.7 : Loan balance

8.6 Display DA Rates: Auditors can view the DA rate history using

T/Code : zhrtc_da-rate_hst
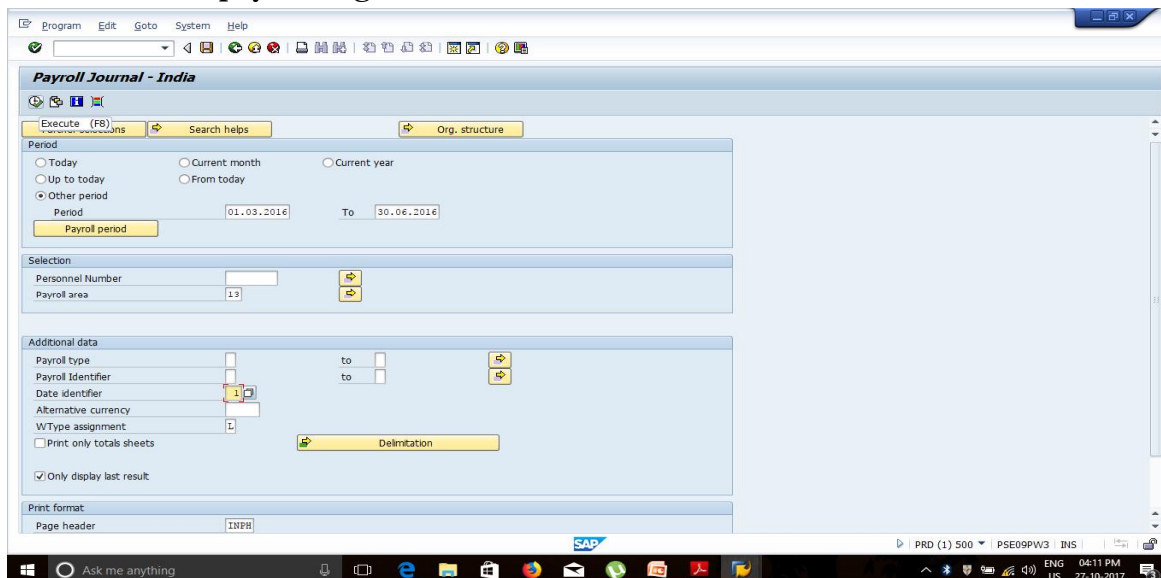
Screenshot 8.8 : DA Rate History

8.7 Pay Roll

The Pay Roll contains complete details of the pay & allowances and deductions thereof in r/o employees.

T/Code: zhrtc_payroll_reg

Screenshot 8.9 : Payroll Journal

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8.8 Personal File of Employees

T/Code: PA10 (Not authorized for auditors)

8.9 Telephone Revenue Accounting

ERP systems are not capable of handling Telecom Billing. In SAP, billing of services will be done only for Franchisees, REM, VSAT (if required), Telecom Factories & Training centers, retail sale of prepaid items and other such services for which standard billing package is not available.

The billing of main BSNL services such as landline, mobile, FTTH, Leased Lines, etc shall be done in respective billing software such as CDR and Kenan Fx. Therefore in these cases customer master and individual line item wise details in respect of each customer shall not be maintained in SAP. For accounting purpose there shall be interface/batch data transfer between SAP and billing software

(Ref: Annexure to No: BSNL/ERP/FICO/RoP/2013-14 Dated 07.07.2013).

The balances in the TR related GL Codes at the end of reporting periods can be examined in SAP and the transaction details can be viewed using the drilldown facility.

Accounting Arrangements for Telecom Revenue in SAP

Landline Revenue (Profit Center:10000)	*Mobile Revenue (Profit Center: 20000)*
The CDR system for landline billing will generate the Trial Balance under each revenue related heads. The balances are captured in Excel sheets and uploaded in SAP, till such time the billing system is also integrated in SAP. The HOAs for TRA are 4110101 to 4220501.	*TB is not generated by the Mobile Billing System. The item-wise balances are generated (in the form of 'Crystal Report') which properly classified and necessary JVs passed by the AO TRA for incorporation in to SAP TB. The HOAs for Mobile revenue are from----------.*

Note: *SAP maintains only the monthly credit/debit and the balances under respective telecom revenue heads. Hence detailed audit checks on correctness of telecom revenue are to be done in the respective billing systems.*

8.10 Taxes & Duties

The Pay & Disbursement functions of SSAs have been centralized at Corporate/Circle Office level in SAP. All claims are processed and paid by the Centralized Settlement Cell (CSC) functioning in Corporate/Circle Office. The CSC will carry out the payment and settlement through NEFT/RTGS/Cheque only. No cash payments of whatever nature/amount will be made by CSC. Accordingly the following tax related activities are also carried out by the CSC:

8.10.1 Accounting of Tax in SAP

Nature of Service Tax	Accounting in SAP
1. *Service Tax payable for services for which billing is not in SAP but in respective billing module*	*Only the balances at the end of the accounting period are migrated in to SAP*
2. *Service Tax payable for services for which billing is in SAP*	*Service tax recoverable and payable details shall be maintained invoice wise and party wise in the excel format and migration shall be done on the basis of these details.*

ST/ED/GST paid on input services/goods are eligible for credit under the tax rules. In one BSNL Circle, Rs 79 Cr paid towards ED in a vendor invoice was wrongly captured in SAP resulting in non-availing of Cenvat credit *(Ref BSN Co Lr No CIT/8-7/2012/ERP/Vol III dt 28th June 2016)*. Such omissions can happen due to non-running of part 2 tab/running JIIEX T/Code for posting simultaneously while doing MIGO.

8.10.2 Settlement Income Tax (TDS on salaries)

After roll out of SAP-ERP, only one TAN has to be maintained for the entire circle at Circle Office level. The filings of e-TDS return, Issue of Form 16 to employees etc are the responsibilities of Circle Office. The e-TDS return is being done at TAN level. Once the salary drawal starts in SAP-ERP, there should not be any transaction against the unit level TAN **(BSNL CO Lr No: BSNL/ERP/FICO/2013-14 Dated 20.12.2013).**

8.10.3 Settlement of Service Tax/Excise Duty/CD/GST

The SSA level registrations for Service Tax have been cancelled and all settlement of ST/ED/GST and filing of tax returns are made at Circle Office/Corporate Office level. Registration under Service Tax Rules is required only at Circle Office/Corporate Office level.

The availing of Cenvat/Input Tax credit on input goods/services and its monthly adjustment from the tax payable on output services for the entire Circle will be done by the Circle Office.

No Vendor will be created for making TDS (on salaries/contractors/Profession, etc)/ Profession Tax/EPF/Sales Tax etc. payment as they will be paid through GL in SAP.

8.11 Infrastructure Sharing- Customer-wise details

T/Code: FBL5N

Each tower sharing operator is a customer to BSNL assigned with a unique customer id.

Obtain the Customer id and proceed. Eg. Airel Customer Id: 40000741

Screenshot 8.10: Customer Line Item Display

The customer balance in r/o Airtel is displayed as below:

Screenshot 8.11: Customer Balance

The result shows a credit balance of Rs 69.68 in r/o Airtel as on 31/3/2016.

To view the document click the line item or display document icon

Screenshot 8.12: Document View

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Call up document overview. Click the **icon**

Document overview is displayed as below:
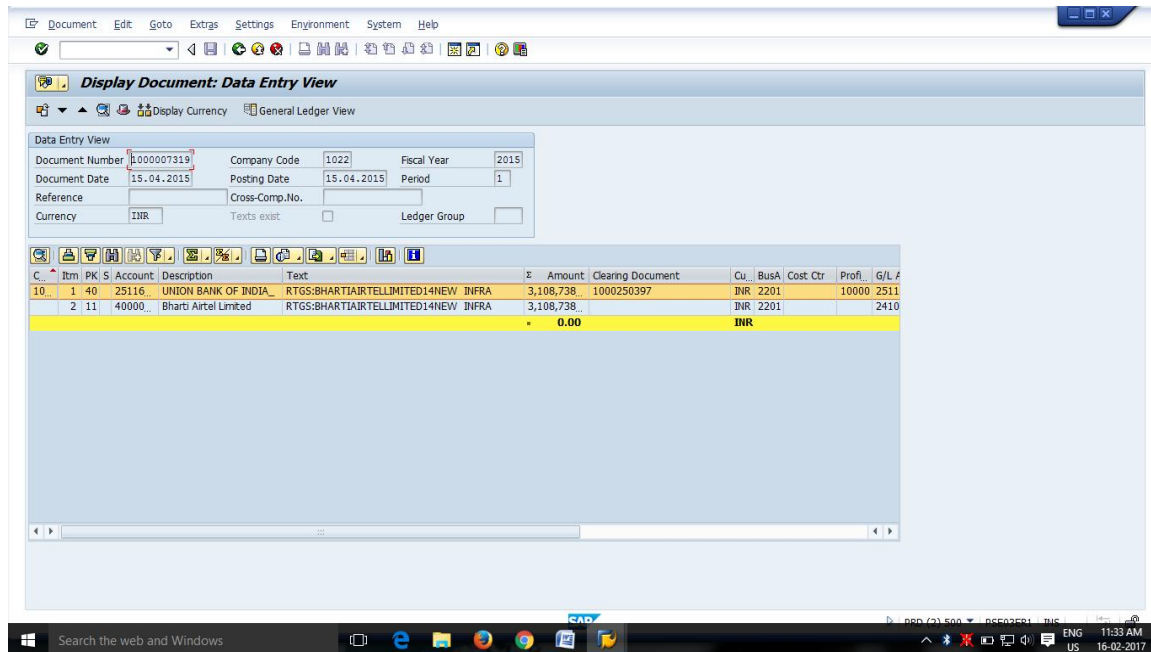
Screenshot 8.13:Document Overview

8.12 Non-PO based Bills

Payment in respect of Pay & Allowances, Personal Claims, Electricity, Water etc is made through SAP. The payments are also centralized at Central Settlement Cell at Corporate/Circle Office level. Employees and service providers for electricity, water etc are also vendors in SAP and all claims are processed under non-PO based bills category, the document type is KR in SAP.

Employees can prefer the personal claims (medical, TA, LTC etc) online through the ESS Portal. Payments are made through the bank account of the employee.

8.12.1 Display Open Non-PO Bills

T/Code: FBL1N.

In the input screen, click on dynamic selection icon which appears on top left of your screen with other icons.

In the next screen, enter the parameters like Document Number, Posting Date, Document Date, Document Type, Business Area etc. If Document type KR alone is given, it will give details of all non-PO related bills.

Screenshot 8.14: Vendor Line Item

Press f8 or ⊕ this icon.

The list of pending bills is displayed in the next screen. Red circle ⊗ in status column indicates unpaid bills and green square ▣ indicates cleared bills (See the first column in the screenshot below).

Screenshot 8.15: pending Bills

8.12.2 Display all Non PO Bills (paid and pending)

Click "all items ", then enter the period and press f8 or ⊕ this icon

You will get list of bills due and list of bills paid and cleared as shown below:

	St	Assignment	DocumentNo	Type	Pstng Date	Doc. Date	S	DD	Amt in loc.cur.	LCurr	Text	Vendor Name	PBk	PM	Clrng doc.	Clearing
	🔴	20141206	1900233946	KR	06.12.2014	04.12.2014		⚡	206.00-	INR	TA BILL FOR JUN/14	DINESH		T		
	🔴	20141206	1900233948	KR							ILL FOR JUL/14	DINESH		T		
	🔴	20141206	1900233949	KR							ILL FOR AUG/14	DINESH		T		
*	🔴								3,992.00-	INR						
	🟢	20140527	1900029360	KR	27.05.2014	01.04.2014			1,728.00-	INR	TA BILL FOR THE MO--	DINESH		T	2000903592	30.10.2014
	🟢	20140905	1900144380	KR	05.09.2014	08.08.2014			2,407.00-	INR	TA BILL FOR THE MO--	DINESH		T	2000903592	30.10.2014
	🟢	20140905	1900144382	KR	05.09.2014	08.08.2014			1,237.00-	INR	TA BILL FOR THE MO--	DINESH		T	2000903592	30.10.2014
	🟢	20141030	2000903592	ZP	30.10.2014	30.10.2014			40,551.00	INR				T	2000903592	30.10.2014
*	🟢								35,179.00	INR						

Pending bills will be seen with red icon

Paid bills will be seen with green icon

Clearing document indicates that bank file has been processed in SAP and sent to the bank

Screenshot 8.16

Note: To view either open items or cleared items, select the relevant box in the above input screen (Screenshot No-----)

8.12.3 Electricity Report Display

T/Code: ZFI030_ER

The report will display electricity expenses with details like consumer number, meter number, payment document number, cheque number, payment date etc. Since auditors have no privilege to run this T/code, the report may be obtained from the accounts wing.

Screenshot 8.17

8.13 Project Management

SAP Project System (PS Module) supports comprehensive business Process for Planning, Controlling & Organizing all the activities carried out during the course of a Project. The preparation of projects, survey reports, detailed estimates, approval, issue of work order/purchase orders, indent processing, declaring fit for commissioning, technical completion report (TECO), Take-Over Report, Closure of WBS etc are done through SAP PS Module.

Auditors should be familiar with the project related process flow in SAP. The User Manual document released by BSNL may be referred to in this regard.

8.13.1 Project Definition

Project definition is a binding framework in SAP for all organizational element created within a project (e.g. WBS and SAP networks). Data like company code, plant and person responsible can be defaulted into WBS if initially entered in the project definition.

8.13.2 Works Breakdown Structure (WBS)

WBS is a model of the project that organizes project tasks into a hierarchy. It forms the operative basis for planning costs, revenues, and payments, as well as for scheduling, and budgeting. For example a Project for expansion of Mobile Network will have WBS elements like Equipment, Media, Civil, Electrical etc. It is similar to the preparation of component-wise Detailed Estimates in the legacy system.

The approved PE/DE/RE PDF Documents can be viewed using **T/Code ZPEDE**. But no access provided to audit.

8.13.3 Display Project Structure

Project Structure will show the details of Plan/Actual/Commitment made in the Project.

Menu path	Logistics → Project System → Information System → Structures → Structure Overview
Transaction Code	CN41

In the input screen, PS Info Profile Z00000000001 (BSNL Structure overview profile) enter the Project number and execute.

Screenshot 8.18

The project structure overview is displayed as below:

Screenshot 8.19: Project Structure

Project Cost: To display the cost of a project (Eg. To display cost of project CM/12/001620) **Report: S_ALR_87013542**

8.13.4 Project Cost under a WBS

T/Codes CJI3

Eg. To display the balance in a WBS element CM/12/00620/01 under the project CM/12/00620, type the project number, WBS number and specify the posting dated.

Screenshot 8.20: Project Cost:

The balances in the selected WBS under the project based on the posing made during the period will be displayed s below:

Screenshot 8.21: Project Cost

8.13.5 Display PO on the Project

To view the PO, click the first line item. Following screen appears.

Screenshot 8.22: PO Display

Click the PO number to display the PO.

8.13.6 Dislpay POs on Projects

T/Code: ME@J

Select Database profiles -000000000001. In the next screen, select the projects.

Screenshot 8.23: PO Display

POs on all projects are displayed as below:

Screenshot 8.24:PO Display

To view a particular PO click on the PO No. Eg. Double Click on the first PO No 4700281209

8.13.7 Project Information System

Project Information System is used to monitor and control the project master data.
It allows us to analyze each project, part of projects, or multiple projects.
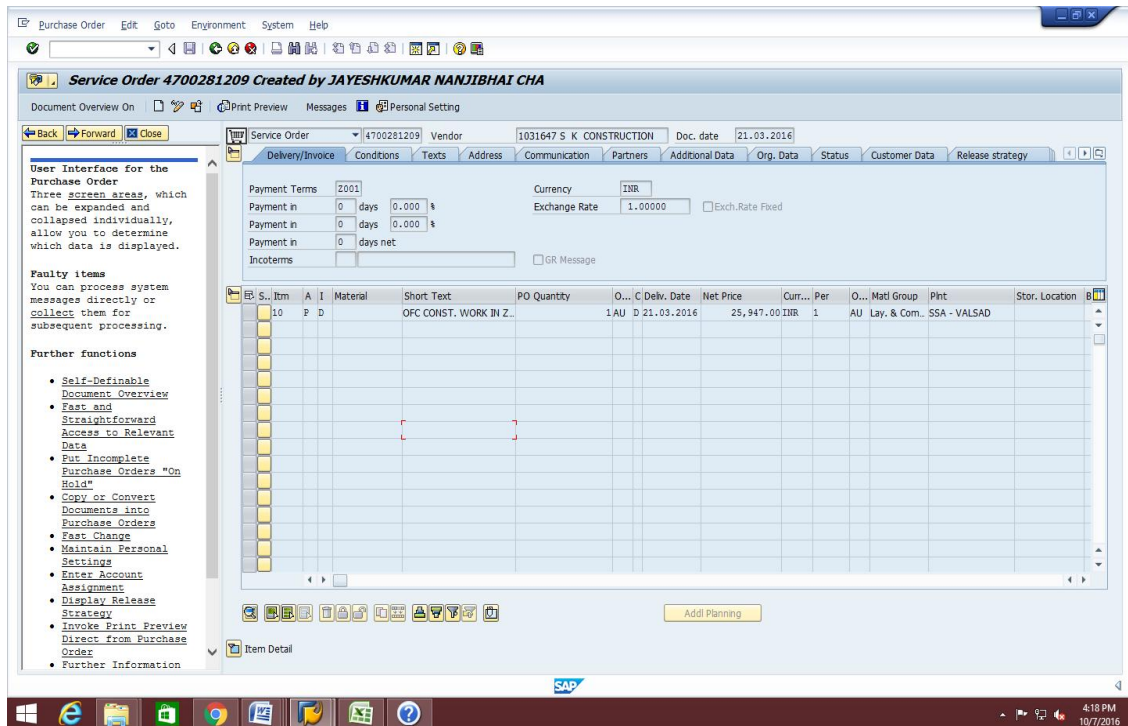**T/Code : CN52**
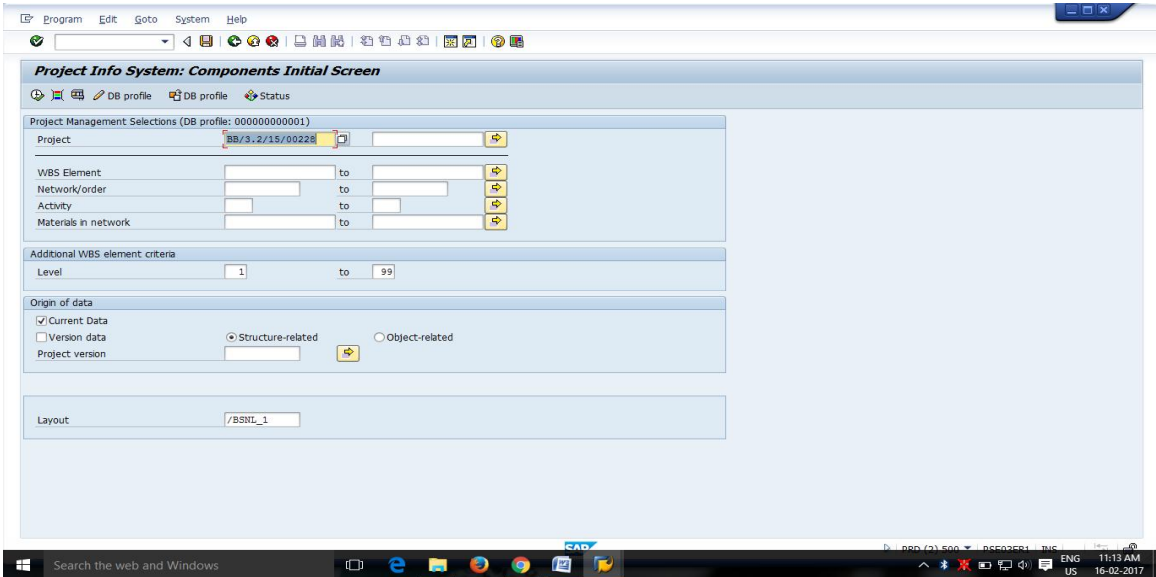
Screenshot 8.25: Project Information

The project information is displayed as below:

Screenshot 8.26: Project Information

To view the PO for OFC Aerial 4F, click the item. PO is displayed as below:

Screenshot 8.27:Project Informtion

8.14 Some Useful Reports in PS Module

Sl No.	Transaction Code	Description	Purpose of the Report
1	ZCM_ACS	Access site Summary Report	This report shows Summary of different types of sites. Not authorized
2	CN41	Project Structure Report	This report shows the entire Project Structure along with details like Planned Costs, Actual Costs, Budget, Commitment, Revenue, Dates etc.
3	CJI3	Project Actual Costs	This report shows the Project Actual Cost line items with details like Posting date, Document date, Document No., Material, Material Description, Material Document No. etc.
4	CN53N	Project Milestones Report	This report shows the Project Milestone details like Milestone description, Fixed date, Actual date etc. Not authorized

8.15 Plant Maintenance Module

Business Process Flow chart

```
                    ┌─────────┐
                    │  Start  │
                    └────┬────┘
                         │
                         ▼
                  ╱──────────────╲          No
                 ╱  Material is    ╲ ──────────────┐
                 ╲   defective     ╱                │
                  ╲──────┬────────╱                 │
                         │ Yes                      │
                         ▼                           │
                  ┌──────────────┐                   │
                  │  Create RGP  │                   │
                  └──────┬───────┘                   │
                         │                           │
                         ▼                           │
                  ┌──────────────┐                   │
                  │ Send material│                   │
                  │ to vendor    │                   │
                  │ with RGP     │                   │
                  │ Printout     │                   │
                  └──────┬───────┘                   │
                         │                           │
     ┌──────────┐        ▼                           │
     │ Create   │  No ╱──────────────╲               │
     │Maintenance│◄───╱   Material     ╲              │
     │ Order    │    ╲ Covered under   ╱              │
     └────┬─────┘     ╲  AMC/Warrant   ╱              │
          │            ╲──────┬───────╱               │
          │                   │ Yes                    │
          ▼                   ▼                        │
     ┌──────────┐     ┌──────────────┐                 │
     │ Create   │     │Receive material│               │
     │ Service  │     │& Close RGP    │                │
     │ PO;      │     └──────┬───────┘                 │
     │ Account  │            │                          │
     │ assigned │            ▼                          │
     │ to Maint.│──────►┌──────────────┐◄───────────────┘
     │ Order    │       │Service entry │
     └──────────┘       │sheet for     │
                        │AMC/Bill      │
                        │Payments      │
                        └──────┬───────┘
                               │
                               ▼
                          ┌─────────┐
                          │   End   │
                          └─────────┘
```

Create Returnable gate pass for the defective equipment
Prerequisite: material code should be already created for the defective equipment.

8.16 Real Estate (RE) Contracts

RE Contracts are created for office buildings/telephone exchanges/ land (used for GBTs)/ roof tops of buildings (used for RTTs/RTPs) etc. to be used by BSNL to provide view of rental process for controlling the cash flows to/from the landlord/tenant. The RE contract manages **all** contracts related to real estate portfolio:

- Real estate contracts of the commercial lease-in category;
- Real estate contracts of the commercial lease-out category;

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- Real estate contracts of the non-commercial/residential category;

RE Contracts are created with validity for limited time periods. RE object may be assigned to a lease for the complete duration of lease or for a specific time segment within the lease period. Contracts will include conditions for calculation of rent, provision for deduction of TDS from rental payments. In case of multiple BPs owning the property separate condition will exist for TDS calculation for each co-owner of the property.

The **Real Estate Management Module** deals with:
- Lease-in & Lease-out of Land and Buildings.
- Lease-in & Lease-out of CMTS Towers & USO Towers   (Part-A and Part-B) – Under Development.
- Staff Quarter Allotment to Employees & Others. Temporary Allotment of Staff Quarters.
- Booking/Allotment of Inspection Quarter, Holiday Home, Hostel, Community Centre, Auditorium etc.
- Management of Contracts.
- Purchase of Land and Buildings

8.16.1 Types of Contracts in REM

Contracts are classified under:

Sl No	Type of Contract	Code
1	Land Lease-Out	Z001
2	Building Lease-Out	Z002
3	Land Lease-In	Z051
4	Building Lease-In	Z052
5	Land Lease-In (Multiple Partner)	Z061
6	Building Lease-In (Multiple Partner)	Z062
7	Lease out of vacant staff quarters-others	Z005
8	Lease out of vacant staff quarters-Govt-PSUs-Their Employees	Z830
9	Lease out of vacant staff quarters-NSNL Employees, BSNL/DoT Retired Employees	Z870
10	SQ Allotment to BSNL Employees	Z800
11	SQ Allotment to BSNL Non POC-circle _customer	Z810

8.16.2 Display Contracts

T/Code: REISCN

Eg. To display all contracts under Company Code 1022 Kerala.

Screenshot 8.28: RE Contracts

The list of all RE contracts in Kerala Circle is displayed as below:

Screenshot 8.29: RE Contracts

To get the details on a contract, click the line item. The details are displayed as below:

Screenshot 8.30: Contract Details

8.17 One Time Vendor (Ref: 6.6.5)

Drill down GL Code 1310105 from TB to get the OTV debits and credits.

Screenshot 8.31: OTV

To view the OTV transactions for April, click the line item for April in the above screen. Transactions are displayed as below:

Screenshot 8.32: OTV

8.18 Customer Balance

Customer Balances as well as Special GL Transaction with Customers – T/code FBL5N is used for checking Customer Invoices as well as Special GL Transaction with Customer like SD

T/Code	FBL5N

SAP Menu	Information System-financial accounting-Accounts Receivable-Reports for AR Accounting-Customer Balance-Customer balance in Local Currency

Input the Customer account number, Company Code and the date ns below:

Screenshot 8.33: Customer Balance

Customer account balance is displayed s below:

Screenshot 8.34: Customer Balance

Note:

In the status column indicates open items and indicates cleared items.

The 4th column indicated the doc type (SA-Document, RV-Billing Doc, Dy- Customer Collection etc)

To display the document double click the line item or the 'display doc' icon. Click Line

Result below:

Screenshot 8.35: Customer Balance

The GL cccnt 1310501 indicates it is Sundry Drs-SAP.

To get the Document header, click "Display Doc header" icon.

Screenshot 8.36: Customer Balance

Doc header will details such as Doc No, Posting Date, Posting Period, Entered By, entry date etc.

To display Document in data Entry View, close the Document Header and click the 'Call Up Document Overview' icon.

Customer Account Balance (Alternate method)
Report: S_ALR_87012172

If the Customer Account number is known

Screenshot 8.37: Customer Balance

Screenshot 8.38: Customer Balance

To view all the customer account balances, keep the Customer Account box blank and execute as below:
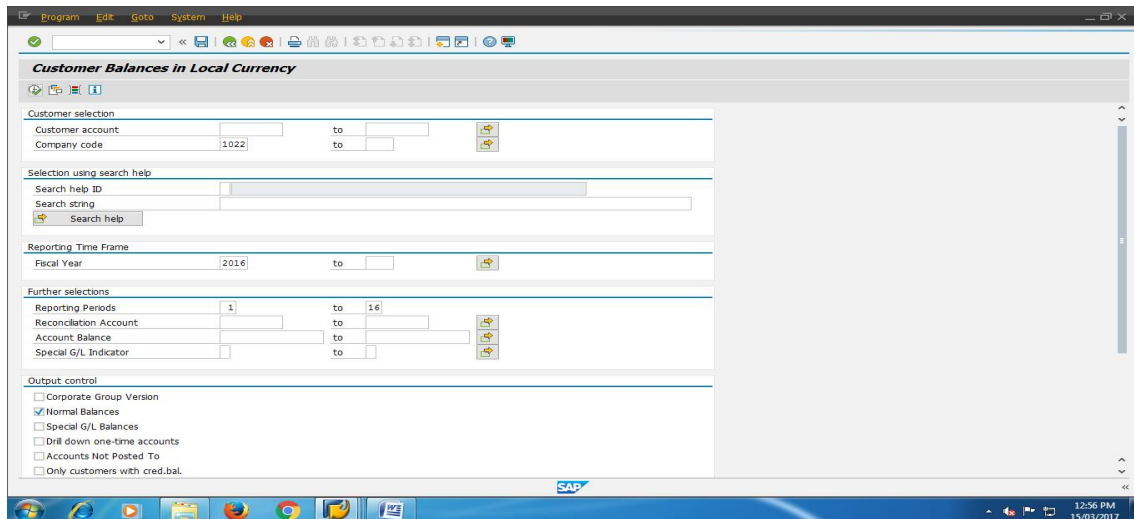
Screenshot 8.39: Customer Balance

Customer Account Balances of all customers are displayed as below:

Screenshot 8.40: Customer Balance
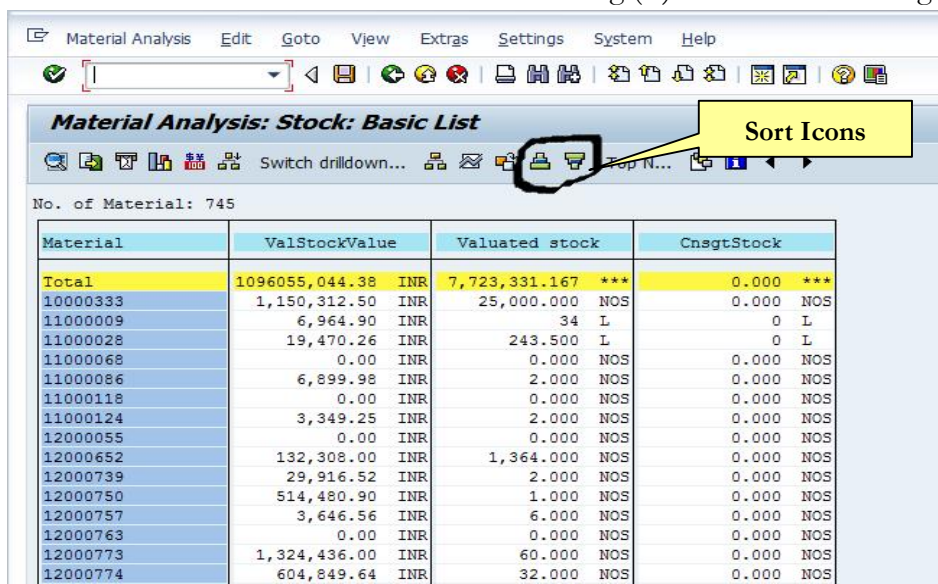
PART 9: AUDIT DOCUMENTATION

Documentation is important in all audits. SAP has replaced most of the manual records. We have to follow the trails in the SAP and extract information in electronic format during audit. In many cases, the required audit evidence may be available only in SAP. The evidences exist in the form of screenshots of documents, document header, GL balances, drilldown reports, schedules, GL view etc. Let us see how the required information can be sorted, stored, extracted and printed.

9.1 Sorting

The sorting function rearranges the rows of line-item reports according to the contents of one or more selected data column. The alphanumeric data can be sorted in ascending or descending order.

The first method makes use of the Sort ascending (A) and Sort descending (B) buttons).

Screenshot: 9.1 Sorting

9.2. Print a SAP Screen shot

Click on the last icon on the right of the Standard Toolbar

Select Hard Copy
This will print a screen shot of your current screen
The screen shot will be automatically sent to your default printer

We can also copy the screenshot using the `PrntScrn` key on the PC/laptop and paste it in a document.
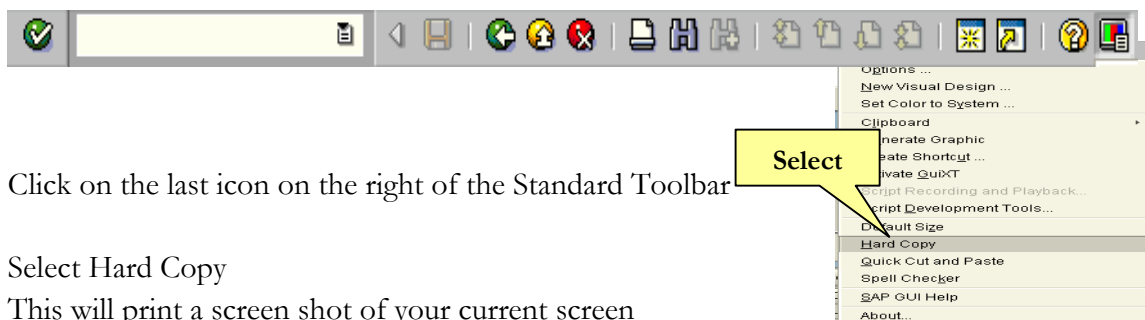
9.3 Print output lists

Click on the Print button on the standard toolbar.   On this screen, we have to specify two choices: name of the printer and whether to print immediately or hold the job until requested.
  OR
Use System List Print from any R/3 window. It will display the Print screen. Fill out details like name of printer, cover sheet, format etc. Click Print button.

9.4 Download 'list' files to the Windows PC

During audit we have to download the 'list' files in to our PC/laptop for further analysis or for documentation purpose.

Select System List Save Local file. The system will display a dialog box with three options from which you can choose your output format. Select the one which best suits your needs and press the Continue button.
The system will display another dialog box requesting the path and name of the file in your local PC. It normally shows the work directory path where the SAPGUI is installed. Enter the file name and press the OK button. The list will be transferred to your local PC.

9.5 Export SAP files to Excel

Screenshot: 9.2: Exporting into Excel

Screenshot 9.3

In the next screen screen enter appropriate path for exporting of data with file name and file extension (.xls, .rtf) and select 'Generate' button.

Screenshot 9.4

9.6 Erasing Audit Log

(If audit is done through the Audit Information System)

Start Audit Information System Workplace (transaction SAIS).
Steps
Choose Administration.

Choose Reorganize Audit Logs.

Limit the selection of log entries by audit structure, check number, and date of entry.

You can delete logs entered before a given date.

For reasons of document security, you cannot remove logs selectively based on any other criteria.

Determine if you want to preserve the last log entry for each check.

By default, the audit information system preserves the last log result for each check step (application) for a given audit structure and check number.

To delete even the final result of a check step, clear the Receive Last Log Entry for Each Application checkbox.

Determine if you want to perform a test run or not.

By default, the audit information system returns the number of log entries that would be deleted by your current selection. No entries are actually deleted.

Recommendation We recommend that you perform a test run before you run an actual deletion. Check whether the number of log entries returned matches your expectation of how many log entries you want to delete.

To actually delete log entries, clear the Test Run checkbox.

Choose   (Execute).

The program returns the number of log entries affected by the operation

9.7 Log off SAP

We can log off SAP from any screen. There are several procedures to log off:

Select the yellow arrow at the top of any screen

From the menu bar, choose System Log off. You get the log off dialog box.